

# Analysis of Fatal Crash Data

## Kentucky: 2009-2013

A Summary of Motor Vehicle Fatal Crash and Fatality Data  
from the Fatality Analysis Reporting System (FARS)





# Kentucky

## About this Report

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This document presents information describing the motor vehicle fatal crashes and fatalities that occurred in the State of Kentucky in the years 2009-2013. It also provides selected fatal crash and fatality data for all of NHTSA's Region 3 and for the U.S. The purpose of this report is to supplement traffic safety performance measures available on the NHTSA website with additional information to provide a more in-depth profile of a State's traffic fatality characteristics and trends from 2009 through 2013.

This report presents primarily FARS data that are reflective of the standard core measures agreed upon by NHTSA and GHSA. The data are presented in two basic formats: basic data plus trend analyses covering a five-year period, and detailed data findings in nine emphasis program areas. It is intended that, with this information, States will be better able to understand their fatality problems in terms of crash types, contributing factors, demographic groups, times, and locations associated with fatalities and fatal crashes over these five years.

The material is organized into the following major sections:

- **Basic Data**
- **Fatalities**
- **Alcohol-Impaired Driving Fatalities and Alcohol-Impairment-Related Fatal Crashes and Fatalities**
- **Speeding-Related Fatal Crashes and Fatalities**
- **Motorcycle Fatal Crashes and Fatalities**
- **Occupant Restraint**
- **Pedestrian and Bicyclist Fatal Crashes and Fatalities**
- **Young Drivers Fatal Crashes and Fatalities**
- **Older Drivers Fatal Crashes and Fatalities**
- **Distraction (2010-2013 only)**

The majority of the tables and figures in this report are based on data from NHTSA's Fatality Analysis Reporting System (FARS) which includes main, auxiliary, and multiple imputation tables. All FARS tables that were updated for a given year by NHTSA were reimported into the database. Data presented in this book for the years 2010, 2011, and 2012 have been revised to reflect recent updates released by NHTSA.



Population data reflect the U.S. Census Bureau's Estimates found at <http://www.census.gov>. These data sources are subject to revision over time, resulting in small differences when comparing statistics generated at different times. The main link to the Census data sources used is: <http://www.census.gov/popest/data/index.html>. Population data used in last year's data books came from 2000-2010 intercensal estimates, as opposed to vintage data which was used for 2012 and 2013 because they are not census years. Please see appendix for more information.

Other population data sources were accessed for National data<sup>1</sup> (divided into State-level groupings); for data by County<sup>2</sup>; for data by State, race, and Hispanic origin<sup>3</sup>, and for data by State, single year of age and sex. It was necessary to obtain geographic locator codes for converting county/city codes in FARS to county/city names<sup>4</sup>.

Finally, helmet laws were imported from the table at: [http://www.ghsa.org/html/stateinfo/laws/helmet\\_laws.html](http://www.ghsa.org/html/stateinfo/laws/helmet_laws.html), and occupant restraint use summary data were imported from the table at: [http://www.ghsa.org/html/stateinfo/laws/seatbelt\\_laws.html](http://www.ghsa.org/html/stateinfo/laws/seatbelt_laws.html).

Small differences may arise in various tables and figures due to rounding. For example, monthly alcohol-impairment-related fatalities, based on NHTSA's multiple imputation method, may not sum exactly to the annual total for this reason.

The electronic copy of this report submitted to NHTSA will be supplemented with a copy on CD. A printed version will be submitted upon request.

Cover art copied with permission from the photo library of the AAA Foundation for Traffic Safety is gratefully acknowledged.

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<sup>1</sup> [http://www.census.gov/popest/data/national/totals/2013/files/NST\\_EST2013\\_ALLDATA.csv](http://www.census.gov/popest/data/national/totals/2013/files/NST_EST2013_ALLDATA.csv)

<sup>2</sup> <http://www.census.gov/popest/data/counties/totals/2013/files/CO-EST2013-Alldata.csv>

<sup>3</sup> <http://www.census.gov/popest/data/state/asrh/2013/files/SC-EST2013-alldata6.csv>

<sup>4</sup> Source: ([http://www.gsa.gov/graphics/ogp/FRPP\\_GLC\\_UnitedStates.xls](http://www.gsa.gov/graphics/ogp/FRPP_GLC_UnitedStates.xls)):  
<http://www.gsa.gov/portal/content/102761>



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## DATA BOOK DEFINITIONS

***Fatality:*** Any police reported crash on a public traffic way in which a driver, occupant, motorcycle rider, pedestrian, or bicyclist is killed or dies within 30 days of the crash.

***“Alcohol Impairment-Related” Fatalities (Old Definition):*** Any fatality occurring on a public traffic way where the known BAC of an involved driver, motorcycle operator, pedestrian or bicyclist is .01 or higher. For purposes of the Data Book, this definition will be limited to an imputed BAC of .08 or higher and will apply to all participants in a crash.

***“Alcohol-Impaired Driving” Fatalities (New Definition):*** Any fatality occurring on a public traffic way where the *imputed* BAC of at least one of the drivers (including motorcycle operators) is .08 or higher.

***Speed Related Fatal Crashes and Fatalities:*** A fatal crash or fatality on a public traffic way is considered to be speeding-related if the driver was charged with a speeding-related offense *or* if an officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash. Beginning in 2009, a new variable replaced all previous speeding driver-related factors to indicate whether a driver’s speed was related to the crash (as identified by law enforcement). In addition to the actions listed above, the new variable includes: speed greater than reasonable or prudent (even if not necessarily over the limit), and exceeding special limit (e.g., for trucks, buses, at night, etc.).

***Motorcycle Rider Fatal Crashes and Fatalities:*** A motorcycle rider or motorcyclist (these terms are interchangeable) fatality refers to any individual on a motorcycle (including both operators and passengers) who is killed in a crash on a public traffic way. The definition of a motorcycle includes: mopeds, scooters, two- or three-wheeled motorcycles, off-road motorcycles, mini bikes, and pocket bikes, but NOT all terrain vehicles (ATVs).

***Occupant Restraint Use:*** Known restraint use (including improper use prior to 2010 and misuse of restraint system/helmet 2010 and later) among occupants of a passenger vehicle involved in a crash on a public traffic way. Passenger vehicles include cars and light trucks (pickup, utility, van, and other). Only fatally-injured occupants are considered in the Data Books.

***Pedestrian and Bicyclist Fatal Crashes and Fatalities:*** A pedestrian is any person on foot, walking, running, jogging, hiking, sitting or lying down who is involved in a motor vehicle fatal crash on a public traffic way. Bicyclists and other cyclists include riders of two-wheel non- motorized vehicles, tricycles, and unicycles powered solely by pedals who are involved in a motor vehicle fatal crash on a public traffic way.

***Young Driver Fatal Crashes and Fatalities:*** Any fatal crash or fatality on a public traffic way involving a driver between the ages of 16 and 20 years old.

***Older Driver Fatal Crashes and Fatalities:*** Any fatal crash or fatality on a public traffic way involving a driver age 65 or older.

***Distracted Driving Fatal Crashes and Fatalities:*** Any fatal crash or fatality on a public traffic way with one or more distractions reported. Reported distractions may include operating a vehicle in a careless or inattentive manner. Behaviors reported as distractions include: the use of car/cell phones, text messaging, fax, GPS/head-up display systems, DVD player and other manual and cognitive distractions such as reading, eating, talking, adjusting the radio, etc. Beginning in 2010, many elements that were encoded as fields in the vehicle table were broken out into a separate *Distraction* table.

*Sources: NHTSA Traffic Safety Fact Sheets, Research Notes, State Traffic Safety Information Web Site Footnotes, and FARS User Manual and Auxiliary Table User Manual*



## Executive Summary

**Total Deaths.** Over the period from 2009 through 2013, there were 3,655 *motor vehicle-related* deaths in Kentucky, an average of about 731 deaths annually. This period, with the exception of 2012, represented a continuing downward trend that began in 2006. Deaths increased in 2012 (+26); but then declined much more substantially in 2013 (-108). This overall trend left 638 total deaths in 2013, 153 fewer than in 2009 (-19%) and 106 fewer than the average of the first 4 years (-15%).

A linear regression analysis showed a decline of about 32 deaths annually, with a reasonably high predictive value ( $R^2 = 0.76$ ). A *3-year moving average* showed a decline of 15 fewer deaths in 2012, and 41 fewer deaths in 2013. While the increase in 2012 may have represented some upward pressure on deaths, the substantial decline in 2013 showed no sign of upward pressure.

[See Tables 1 and 29 in the report; as well as Figure 1 for trends in total deaths in Kentucky.]

**Population-based fatality rate.** Kentucky's population increased by about 2% from 2009 through 2013. This increase, combined with the 19% decline in deaths (2013 vs. 2009), resulted in a *population-based death rate* that was 21% lower in 2013 than in 2009 (16% lower than the average of the first 4 years).

[See Table 1 and Figure 2 in the report for population-based fatality rates in Kentucky.]

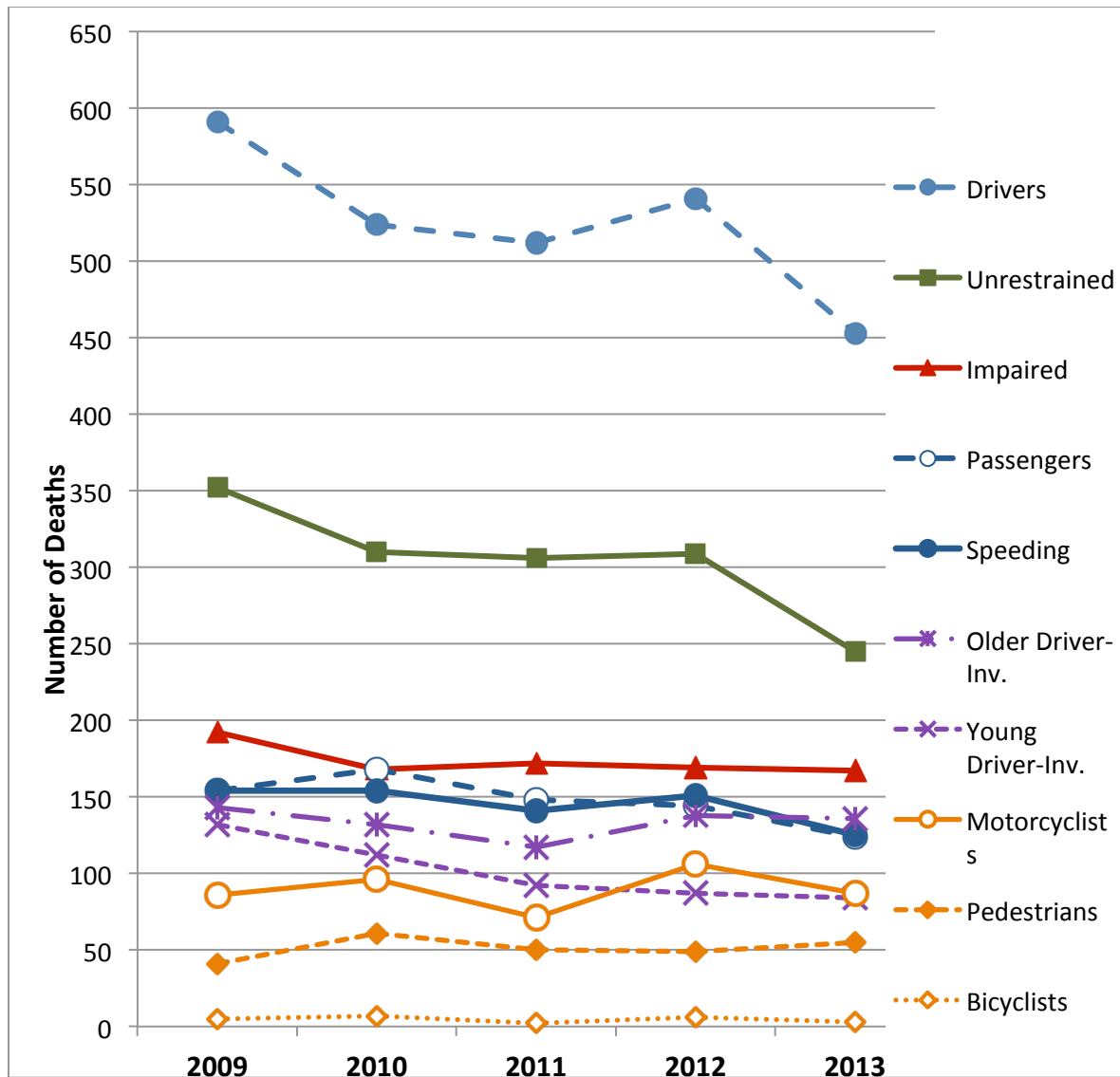
## Major Contributors to Fatalities and Trends in Kentucky

**Driver/Operator fatalities** accounted for the largest proportion of fatalities, about 72% of total deaths over the five-year period. *Drivers* accounted for about 3.6 times as many deaths as *passengers* (20%). *Driver* deaths declined substantially from 2009 through 2011 (-79 total); increased modestly in 2012 (+29); and then declined sharply in 2013 (-88). This left 453 driver deaths in that final year, 138 fewer than in 2009 (-23%) and 89 fewer than the average of the first four years (-16%). As with total deaths, the 2012 increase may have reflected an upward pressure on deaths, but the large decline in 2013 certainly runs contrary to such a trend.

**Passenger** deaths increased in 2010 (+14) but declined in every subsequent year through 2013 (-44 total). This pattern left 124 passenger deaths in 2013, 30 fewer than in 2009 (-19.5%) and also about 30 fewer than the average of the first 4 years (-19%).

The next largest categories (after *driver* deaths) were *behavior related*. **Unrestrained occupant** deaths averaged about 304 per year and accounted for 42% of total deaths; **alcohol-impaired driving** deaths averaged 174 per year, accounting for 24%; and **speed-related** deaths averaged about 145 per year and accounted for 20% of total deaths. *Unrestrained occupant* deaths declined from 2004 through 2011 (-221 deaths). There was a slight increase in 2012 (+3), followed by a large decline in 2013 (-64). The largest decline over the past 10 years was in 2007 (-92), when Kentucky implemented its primary seat belt law. During the most recent 5-year period, from 2009 through 2013, *unrestrained* deaths declined by 107, representing a 30% decline from 2009 and a 23% decline compared to the average of the first 4 years.





**Fatality Trends in Kentucky: 2009 through 2013, by Category**

*Alcohol impaired driving* deaths declined substantially from 2005 through 2008 (-81), then increased slightly in 2009 (+6). Although such deaths declined in 2010 (-24), their numbers have changed very little since that time. There were 167 impaired driver-related deaths in 2013, 25 fewer than in 2009 (-13%) and 8 fewer than the average of the first 4 years (-5%).

*Speed-related* deaths have also declined over the past 10 years, particularly from 2004 through 2007 (-68); but they have been relatively stable ever since. *Speed-related* deaths did not change much from 2009 through 2012, but they declined in 2013 (-26), leaving 125 speed-related deaths in that year. This was 29 fewer than in 2009 (-19%) and 25 fewer than the average of the first 4 years (-17%).



[See Table 4, as well as Figures 3 and 4 for alcohol impaired driving-related deaths; see Table 8, and Figures 5 and 6 for speed-related deaths; and see Table 11 and Figures 7 and 8 for unrestrained occupant deaths.]

Two age-related categories, **older driver-involved** deaths and **young-driver involved** deaths, accounted for about 18% and 14% of total deaths (respectively). *Older driver-involved* deaths declined from 2009 through 2011 (-26 total); then increased in 2012(+21); and remained relatively unchanged in 2013 (-2). This left 136 *older driver-involved* deaths in 2013, 7 fewer than in 2009 (-5%) but 3 more than the average of the first 4 years (+3%). *Young driver-involved* deaths have declined by more than 50% over the past 10 years, very likely associated with the decline in the economy. Over the past 5 years, they declined by 36% relative to 2009, and by 21% relative to the average of the first 4 years (from 2009 through 2012). There were 84 such deaths in 2013, compared with 132 in 2009.

[See Table 23 and Figures 15 and 16 for young driver-involved deaths; and see Table 26 and Figures 17 and 18 for older driver-involved deaths.]

Three *non-occupant categories* accounted for a total of about 20% of all deaths. **Motorcyclists** accounted for 12%; **pedestrians** accounted for 7%; and **bicyclists** accounted for 1%. *Motorcyclist* deaths have varied substantially throughout the past decade, increasing from 2004 through 2007, declining from 2007 through 2009, and then varying erratically over the past 5 years. There were 86 *motorcyclist* deaths in 2009, increasing to 96 deaths in 2010 (+10), declining to 71 in 2011 (-25), then increasing to 106 in 2012 (+35) before declining to 87 in 2013 (-19). This final number was just 1 death greater than in 2009 and 3 less than the average of the first 4 years. Thus, while there appears to have been downward pressure on *motorcyclist* deaths immediately prior to 2009, there have been opposing pressures on such deaths over the most recent 5 years.

The trend in *pedestrian* deaths has been relatively flat for the past 10 years. There was an average of 53 such deaths annually in the 5 years from 2004 through 2008, and there was an average of 51 deaths from 2009 through 2013. During the most recent 5 years, there was an increase in 2010 (+20); a decline in 2011 (-10); little change in 2012 (-1); and an increase in 2013 (+6). This left 55 deaths in 2013, 14 more than in 2009 (+34%) and 5 more than the average of the first 4 years (+9.5%). **Bicyclist** deaths declined from 2005 through 2007 and then increased in 2008. Over the past 5 years, such deaths have vacillated considerably, with increases in 2010 and 2012 (+6 total) and declines in 2011 and 2013 (- 8 total). There were 3 such deaths in 2013, 2 fewer than in 2009 (-40%) and 2 fewer than the average of the first 4 years (-40%).

[See Table 14 and Figures 9 and 10 for motorcyclist deaths; Table 17 and Figures 11 and 12 for pedestrian deaths; see Table 20 and Figures 13 and 14 for bicyclist deaths.]

In summary, this period shows a decline in 2009; a *leveling out* in 2010, 2011, and 2012; and then another decline in 2013. Comparing deaths in 2013 with 2009, there were declines in 8 of 10 categories, all except *pedestrians* and *motorcyclists*. Comparing 2013 with 2012, there were declines in 9 of 10 categories, all except *pedestrians*. Overall, there appears to have been a general downward trend (since 2005) that was interrupted by a modest increase in 2012.



# **BASIC DATA AND TREND ANALYSES**



## BASIC DATA AND TREND ANALYSES

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### About This Section

This Section contains basic information about the motor vehicle fatalities that occurred in Kentucky from 2009 through 2013. It is organized according to the following 10 topics:

- **Total Fatalities**
- **Alcohol-Impaired Driving Fatalities**
- **Speeding-related Fatalities**
- **Unbelted Passenger Vehicle Occupant Fatalities**
- **Motorcycle Rider Fatalities**
- **Pedestrian Fatalities**
- **Bicyclist Fatalities**
- **Fatalities Involving Young Drivers**
- **Fatalities Involving Older Drivers**
- **Distraction**

Each of these subsections includes a five-year data table for the State, showing the number of annual fatalities, along with fatality rate: deaths per 100,000 population. The table also shows the percentage of total fatalities in the State accounted for by each category and the State's percentage of all such fatalities in the Region. Two additional tables contain similar data and trends for the Region and the Nation, respectively.

Graphs showing Kentucky's trends are also provided in each section. For each category, these graphs show five years of data for: 1) *number* of fatalities; and 2) the *population-based fatality rate*. Each graph includes a linear trendline and a 3-year moving average line. Linear trends are projected out three years to show the expected outcomes if the existing trend were to continue beyond the last year for which data are available.

Much of the data included in this report can also be found on the NHTSA Web site and are easily accessible for future updating. This can be done by logging on to the site at <http://www-fars.nhtsa.dot.gov/Main/index.aspx>. Although queries cannot be run across multiple years, there is a wealth of information that may be obtained by running single year queries. Mapping data are also available, and result sets from a query may be exported to a variety of formats. There are many other areas within which to obtain data, and it is suggested that the user explore that system to become familiar with this valuable resource.



## Total Fatalities

Table 1 shows basic data on Kentucky fatalities from 2009 through 2013. It indicates that annual motor vehicle fatalities fell in 2013, with the 638 fatalities representing a 15.4% decrease when compared to the average of the prior four years (754 fatalities), and a 19.3% decrease when compared to the count in 2009 (791). During the 2009-2013 period, Kentucky's *population* showed a slight, 1.0% increase (in 2013 when compare to the prior four years), while the State's *population-based fatality rate* (expressed as the number of deaths per 100,000 population) decreased by 16.2%.

The data in Table 1 show that in 2013, Kentucky accounted for 13.8% of the *population* in Region 3, and 17.8% of the Region's *fatalities*. Kentucky's proportion of the Region's population decreased slightly throughout the period observed, falling by 1.2% in 2013 when compared to the prior four years (14.0%). During the same period, the State's proportion of the Region's fatalities also decreased, but by a larger margin (10.7% in 2013 when compared to the 2009-2012 average of 19.9%).

A comparison of Kentucky data with the Regional data (Table 2) and National data (Table 3) indicates that Kentucky's 2009-2013 population-based fatality rate (16.76 per 100,000 residents) was higher than both the Regional rate (11.95) and the National rate (10.65) during the same years.

**Table 1. Kentucky Basic Data**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Total Fatalities</b>	791	760	720	746	638	-19.34%	-15.41%
<b>Population</b>	4,317,074	4,346,266	4,369,356	4,380,415	4,395,295	1.81%	0.97%
<b>Pop. Rate***</b>	18.32	17.49	16.48	17.03	14.52	-20.78%	-16.22%
<b>Pct of Region Fatalities</b>	20.21%	20.23%	19.66%	19.63%	17.81%	-11.91%	-10.69%
<b>Pct of Region Population</b>	14.04%	13.99%	13.95%	13.86%	13.80%	-1.72%	-1.15%

\*\*\*Fatality rate per 100,000 population



Table 2 shows that total annual motor vehicle fatalities fell in Region 3, decreasing by 5.3% in 2013 when compared to the 2009-2012 average, and falling by 8.4% in 2013 when compared to 2009. The population-based fatality rate also decreased, dropping by 7.3% in 2013 when compared to the prior four years, and decreasing by 11.6% in 2013 when compared to 2009. During the same timeframe, the Region's population increased (by 2.1% in 2013 when compared to the prior four-year average).

**Table 2. Region 3 Basic Data**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Total Fatalities</b>	3,913	3,756	3,663	3,800	3,583	-8.43%	-5.29%
<b>Population</b>	30,754,698	31,076,618	31,331,145	31,607,746	31,859,076	3.59%	2.14%
<b>Pop. Rate***</b>	12.72	12.09	11.69	12.02	11.25	-11.61%	-7.27%

\*\*\*Fatality rate per 100,000 population

Table 3 shows that Nationwide, fatalities declined slightly overall, with the Nation's fatalities decreasing by 1.7% and population-based fatality rate decreasing by 3.5%, each in 2013 when compared to the respective 2009-2012 average.

**Table 3. Nationwide Basic Data**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change 2013 vs. prior 4-yr Avg.
<b>Total Fatalities</b>	33,883	32,999	32,479	33,782	32,719	-3.44%	-1.70%
<b>Population (thousands)</b>	306,772	309,350	311,592	313,914	316,129	3.05%	1.84%
<b>Pop. Rate***</b>	11.05	10.67	10.42	10.76	10.35	-6.29%	-3.48%

\*\*\* Fatality rate per 100,000 population



Figure 1 shows total deaths for each year, a three-year moving average, and the linear trend in total fatalities for Kentucky. If the linear trend were to continue, traffic-related fatalities would amount to **635** in 2014, **603** in 2015, and **571** in 2016. The calculated  $R^2$  value for this trendline is 0.76.<sup>5</sup> The three-year moving average, represented by the red line, shows a steady decline.

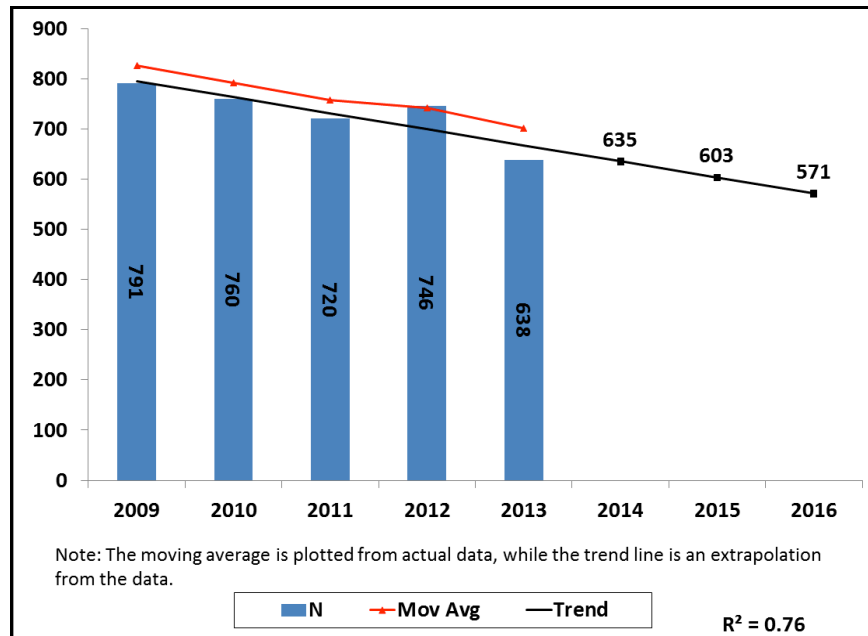
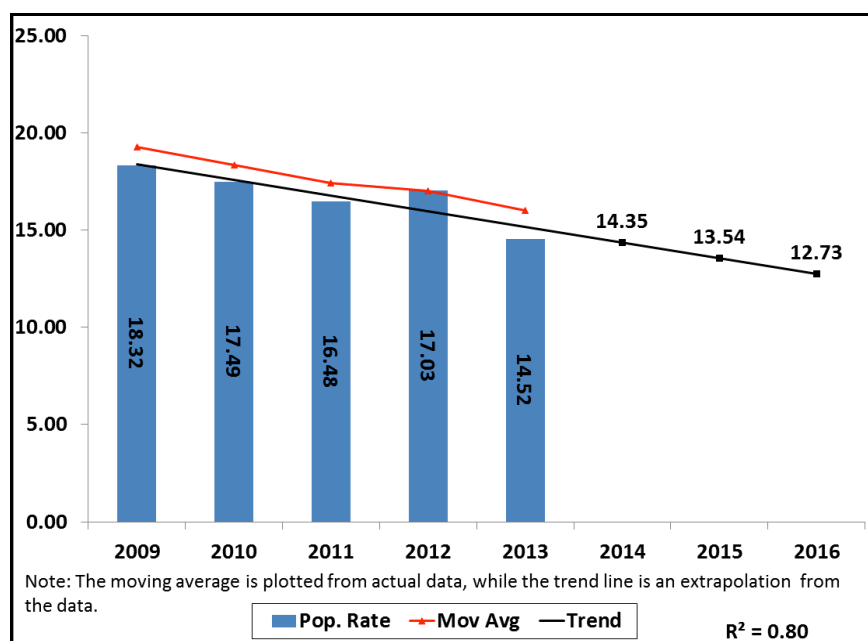


Figure 1. Kentucky Total Fatalities

<sup>5</sup> The  $R^2$  value is called the *coefficient of determination*. It is a measure of how much of the change in fatalities is accounted for by a unit change over time. A high value of  $R^2$  (up to a maximum of 1.0) would indicate that time (i.e., year) accounts for a good deal of the variability in – and may be regarded as a good predictor of – fatalities. A low value of  $R^2$  (closer to 0.0) indicates that time is a relatively poor predictor of fatalities. See the Appendix for a more complete discussion of linear trendlines and this coefficient.



Figure 2 presents the trend in the *population-based* fatality rate for Kentucky. If this trend were to continue, there would be **14.35** deaths per 100,000 population in 2014, **13.54** in 2015, and **12.73** in 2016. Here the  $R^2$  value is 0.80 and the three-year moving average declines.



**Figure 2. Kentucky Total Fatalities, Population Rate**

## Alcohol-Impaired Driving Fatalities

Table 4 shows that in Kentucky, the number of alcohol-impaired driving fatalities fluctuated throughout the five-year period (2009-2013), but ultimately fell to its lowest level of the period in 2013. The 2013 total (167 deaths) represents a 4.7% decrease compared to the 2009-2012 average (175 deaths), and a larger, 13.0% decrease from the 2009 total (192 deaths). Kentucky's alcohol-impaired *population-based* fatality rate followed a similar pattern as the number of fatalities, with the 2013 rate (3.80 deaths per 100,000 population) representing a 5.6% decrease when compared to the 2009-2012 average (4.03), and a larger, 14.6% decrease when compared to the rate in 2009 (4.45).

The alcohol-impaired percent of total deaths is a key index of the problem of alcohol-impaired driving fatalities. In Kentucky, this proportion fluctuated, but ultimately increased to its highest level of the period in 2013 (26.2%), rising by 12.7% when compared to the average of the previous four years (23.2%), and increasing by 7.8% when compared to the 2009 proportion (24.3%).

Table 4 shows that Kentucky's proportion of the Region's alcohol-impaired deaths decreased to its lowest level of the period in 2013 (15.6%), falling by 4.6% when compared to the 2009-2012 average (16.4%), and dropping by 8.4% in 2013 when compared to 2009 (17.1%).



Overall, these data indicate that in Kentucky, the number of alcohol-impaired driving fatalities followed a similar pattern as that seen for total fatalities: fluctuating slightly throughout the five-year period, but ultimately decreasing in 2013. However, while Kentucky's number of total fatalities decreased throughout the five years (by 15.4% in 2013 when compared to the prior four years), the State's alcohol-impaired driving fatalities as a proportion of total deaths *increased* (by 12.7%) (see Table 1).

**Table 4. Kentucky Alcohol-Impaired Driving Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	192	168	172	169	167	-13.02%	-4.71%
<b>Pop. Rate**</b>	4.45	3.87	3.94	3.86	3.80	-14.57%	-5.62%
<b>Pct of Total</b>	24.27%	22.11%	23.89%	22.65%	26.18%	7.84%	12.66%
<b>Pct of Region</b>	17.05%	16.03%	16.20%	16.16%	15.62%	-8.38%	-4.57%

\*\*Fatality rate per 100,000 population

Table 5 provides alcohol-impaired fatality data for the entire Region and Table 6 provides such data for the Nation. Over the entire five-year period, the alcohol-impaired population-based fatality rate in Kentucky (3.98 deaths per 100,000 residents) was higher than the rate for Region 3 (3.42), and both were higher than the National rate (3.28).

With regard to change, Table 5 shows that in Region 3, the number of alcohol-impaired driving fatalities fluctuated throughout the five-year period (2009-2013), showing little change (a 0.1% decrease) in 2013 when compared to the 2009-2012 average, but decreasing by 5.1% when compared to the 2009 proportion. During the same timeframe, Region 3's population-based fatality rate decreased by 2.2%, while the Region's alcohol-impaired percent of total deaths increased by 5.4%.

**Table 5. Region 3 Alcohol-Impaired Driving Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	1,126	1,048	1,062	1,046	1,069	-5.06%	-0.14%
<b>Pop. Rate**</b>	3.66	3.37	3.39	3.31	3.36	-8.35%	-2.23%
<b>Pct of Total</b>	28.78%	27.90%	28.99%	27.53%	29.84%	3.68%	5.43%

\*\*Fatality rate per 100,000 population

Table 6 indicates that Nationwide, in 2013 alcohol-impaired deaths declined by 1.9% and the alcohol-impaired population-based fatality rate dropped by 3.7%, each when comparing the 2013 figures to the 2009-2012 averages. The Nation's alcohol-impaired percent of total deaths showed minimal change during the five years.

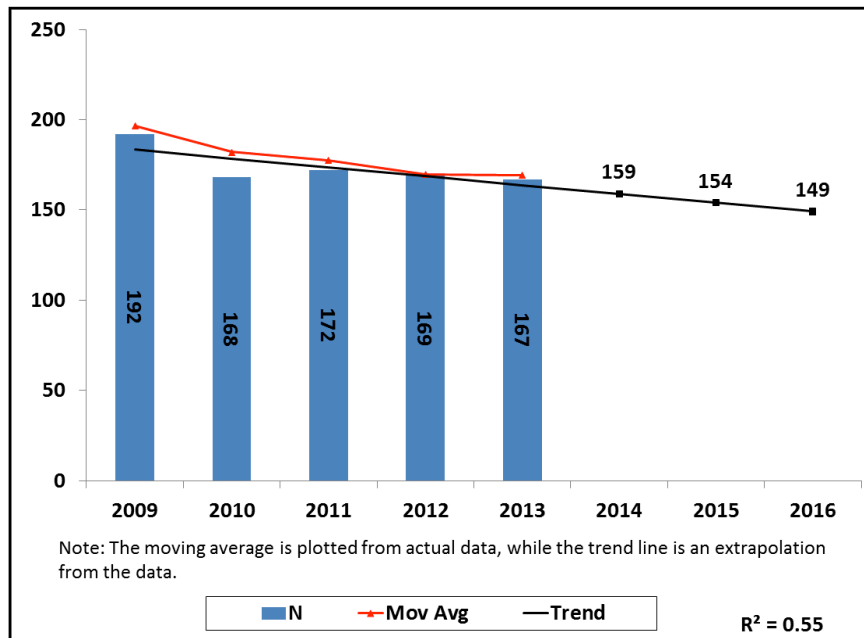


**Table 6. Nationwide Alcohol-Impaired Driving Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	10,759	10,136	9,865	10,336	10,076	-6.35%	-1.93%
<b>Pop. Rate**</b>	3.51	3.28	3.17	3.29	3.19	-9.12%	-3.70%
<b>Pct of Total</b>	31.75%	30.72%	30.37%	30.60%	30.80%	-3.02%	-0.23%

\*\* Fatality rate per 100,000 population

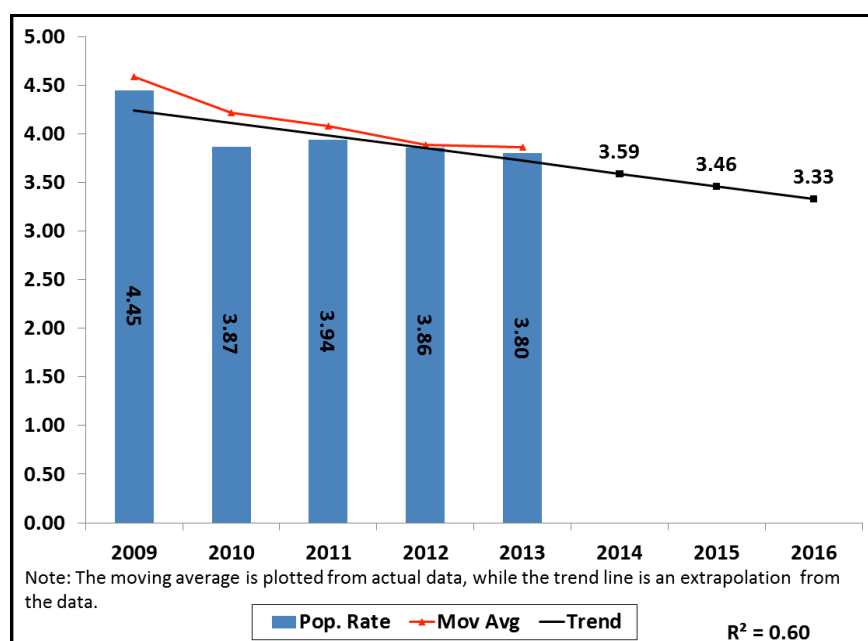
Figure 3 shows the downward trend in Kentucky's *alcohol-impaired driving fatalities*. If this trend were to continue, there would be **159** such fatalities in 2014, **154** in 2015, and **149** in 2016. The  $R^2$  value for this trendline is 0.55 and the three-year moving average (red line) declines.



**Figure 3. Kentucky Alcohol-Impaired Driving Fatalities**



The *population-based rate* seen in Figure 4 also shows a downward trend, projecting to **3.59** deaths (per 100,000 residents) in 2014, **3.46** in 2015, and **3.33** in 2016. The  $R^2$  value for this trendline is 0.60 and the moving average shows a similar pattern as that seen in Figure 3, above.



**Figure 4. Kentucky Alcohol-Impaired Driving Fatalities, Population Rate**

*BAC reporting rates* for Kentucky, the U.S., and the “Best State(s)” are presented in Table 7. Throughout the five-year period, Kentucky’s average *rate of BAC reporting for surviving drivers* was 46.2%, higher than the rate of reporting in the Nation (31.2%), but both were much lower than that of the best State for the given period (87.1%). Clearly, there is a large range of testing and reporting. Kentucky reported BACs for 40.0% of *surviving* drivers in 2013, compared with an average of 47.5% across the prior four-year period, representing a 15.7% decrease in this index for the State.

Kentucky had a higher rate of reporting for *fatally-injured drivers*, averaging 77.7% over the five-year period, and was similar to that of the Nation, which reported BACs for 75.4% of fatally-injured drivers during the same years. By comparison, the best State provided BACs for 96.4% of fatally-injured drivers. Throughout the 2009-2013 period, Kentucky saw a 1.4% increase in the percentage of *killed* drivers for which there was a reported BAC, when comparing the 2013 proportion (78.6%) to the average of the prior four years (77.5%).

Among *all drivers involved* in fatal crashes (i.e., fatally injured and surviving) from 2009 through 2013, the average percentages with reported BACs were 62.6% in Kentucky, 52.1% throughout the U.S., and 90.2% in the best State. Kentucky experienced a 4.8% decrease in this index in 2013 (60.0%) when compared to the prior four years (63.1%).



**Table 7. BAC Reporting Rates for Drivers and Motorcycle Operators**

		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Surviving Drivers and Operators</b>						
Total	<b>KY</b>	519	513	486	482	420
	<b>U.S.</b>	23,502	23,527	23,025	24,174	23,703
Total with BAC Reported	<b>KY</b>	229	258	227	235	168
	<b>U.S.</b>	7,188	7,927	7,484	7,569	6,630
% with BAC Reported	<b>KY</b>	44.1%	50.3%	46.7%	48.8%	40.0%
	<b>U.S.</b>	30.6%	33.7%	32.5%	31.3%	28.0%
	<b>Best State*</b>	85.8%	92.3%	87.9%	85.4%	80.3%
<b>Killed Drivers and Operators</b>						
Total	<b>KY</b>	591	524	512	541	453
	<b>U.S.</b>	21,835	21,072	20,815	21,490	20,871
Total with BAC Reported	<b>KY</b>	448	404	418	410	356
	<b>U.S.</b>	16,753	16,405	15,846	16,097	14,905
% with BAC Reported	<b>KY</b>	75.8%	77.1%	81.6%	75.8%	78.6%
	<b>U.S.</b>	76.7%	77.9%	76.1%	74.9%	71.4%
	<b>Best State*</b>	100.0%	100.0%	98.3%	94.7%	95.1%
<b>All Drivers and Operators</b>						
Total	<b>KY</b>	1,110	1,037	998	1,023	873
	<b>U.S.</b>	45,337	44,599	43,840	45,664	44,574
Total with BAC Reported	<b>KY</b>	677	662	645	645	524
	<b>U.S.</b>	23,941	24,332	23,330	23,666	21,535
% with BAC Reported	<b>KY</b>	61.0%	63.8%	64.6%	63.0%	60.0%
	<b>U.S.</b>	52.8%	54.6%	53.2%	51.8%	48.3%
	<b>Best State*</b>	89.9%	91.1%	92.9%	91.4%	85.2%

\* Best State: highest percents could be in different States for different categories



## Speeding-Related Fatalities

A speeding-related fatality is defined as one that occurred in a crash where a driver was charged with a speeding-related offense or where an officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor.

Table 8 shows that there were 154 speeding-related fatalities in Kentucky in 2009, with this number fluctuating, but ultimately decreasing to its lowest point of the period in 2013. The 125 speeding-related fatalities in Kentucky in 2013 represent a 16.7% decrease compared to the average of the prior four years (150), and an 18.8% decrease when compared to the 2009 total. The population-based fatality rate followed a similar pattern as the number of fatalities. Kentucky's 2013 speeding-related population-based fatality rate (2.84 deaths per 100,000 population) is 17.5% lower than the 2009-2012 average (3.45), and 20.3% lower than the 2009 rate (3.57).

In 2009, 19.5% of all traffic fatalities in Kentucky were speeding-related, with this number fluctuating throughout the five-year period (2009-2013). The 2013 percentage (19.6%) represents a decrease of 1.5% compared the average of the previous four years (19.9%), but little change (a 0.6% increase) compared to the proportion in 2009. Throughout the five-year period, Kentucky accounted for 12.3% of Region 3's speeding-related traffic fatalities, with this figure fluctuating throughout the period. The 2013 proportion (12.6%) represents a 2.7% increase when compared to the prior four-year average (12.2%), but a 3.7% *decrease* when compared to the 2009 proportion (13.1%).

**Table 8. Kentucky Speeding-Related Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	154	154	141	151	125	-18.83%	-16.67%
<b>Pop. Rate**</b>	3.57	3.54	3.23	3.45	2.84	-20.28%	-17.46%
<b>Pct of Total</b>	19.47%	20.26%	19.58%	20.24%	19.59%	0.63%	-1.48%
<b>Pct of Region</b>	13.06%	12.25%	11.70%	11.97%	12.58%	-3.72%	2.74%

\*\*Fatality rate per 100,000 population

Table 9 shows that from 2009 through 2013, the number of speeding-related fatalities decreased throughout Region 3, by 18.9% in 2013 when compared to the prior four years; the population-based death rate similarly decreased Regionally (by 20.6%). The Region's proportion of speeding-related fatalities to total fatalities also fell during the five years, decreasing by 14.4% in 2013 when compared to the 2009-2012 average.



**Table 9. Region 3 Speeding-Related Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	1,179	1,257	1,205	1,261	994	-15.69%	-18.89%
<b>Pop. Rate**</b>	3.83	4.04	3.85	3.99	3.12	-18.61%	-20.59%
<b>Pct of Total</b>	30.13%	33.47%	32.90%	33.18%	27.74%	-7.93%	-14.36%

\*\*Fatality rate per 100,000 population

As shown in Table 10, speeding-related fatalities ultimately decreased throughout the U.S., by 7.4% in 2013 when compared to the prior four-year average. The *population-based fatality rate* decreased Nationally as well, falling by 9.0% during the same timeframe. The Nation's *speeding-related percent of total deaths* averaged 30.8% during the 2009-2013 period, with this proportion decreasing by 5.7% in 2013 when compared to the 2009-2012 average.

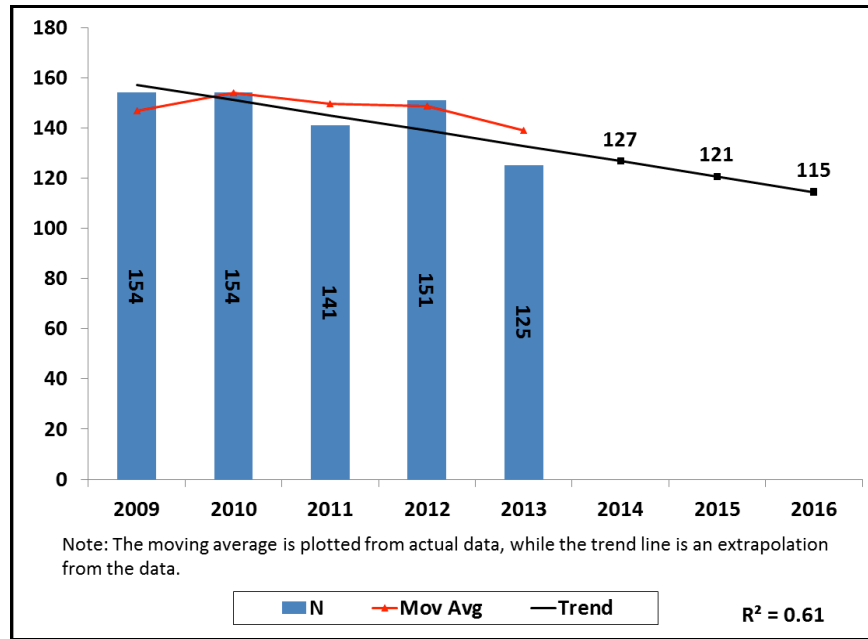
**Table 10. Nationwide Speeding-Related Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	10,664	10,508	10,001	10,329	9,613	-9.86%	-7.35%
<b>Pop. Rate**</b>	3.48	3.40	3.21	3.29	3.04	-12.52%	-9.03%
<b>Pct of Total</b>	31.47%	31.84%	30.79%	30.58%	29.38%	-6.65%	-5.74%

\*\* Fatality rate per 100,000 population

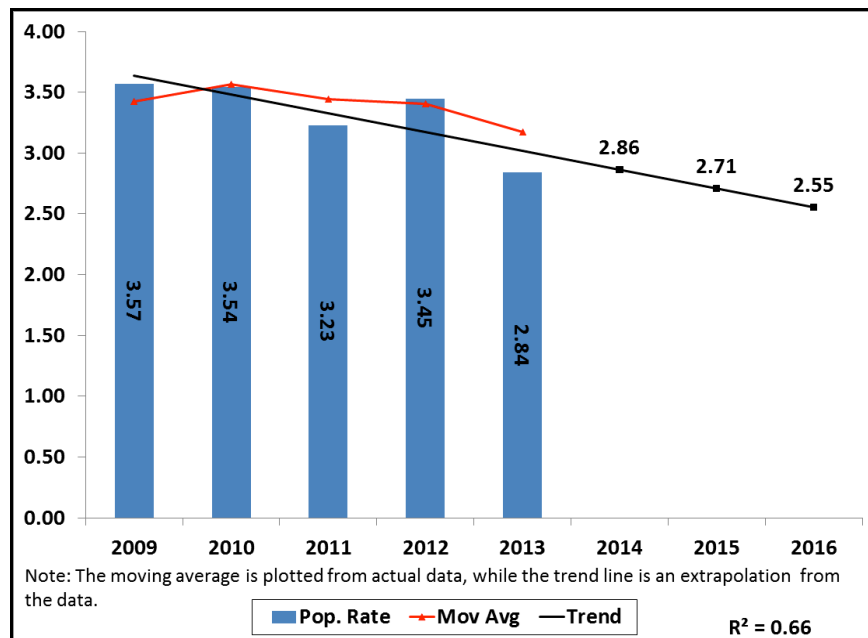
Figure 5 shows the trend in Kentucky's speeding-related fatalities. If this trend were to continue, the number of such fatalities would be **127** in 2014, **121** in 2015, and **115** in 2016. The  $R^2$  value for this projection is 0.61. The three-year moving average shows an initial increase, followed by a decline throughout the rest of the period.





**Figure 5. Kentucky Speeding-Related Fatalities**

Figure 6 presents a pattern similar to that seen in the preceding chart: a declining linear trend and a three-year moving average that initially increases and then declines during the rest of the period. Here the linear trend projects **2.86** deaths (per 100,000 population) in 2014, **2.71** in 2015, and **2.55** in 2016. The  $R^2$  value for this trendline is 0.66.



**Figure 6. Kentucky Speeding-Related Fatalities, Population Rate**



## Unbelted Passenger Vehicle Occupant Fatalities

Table 11 shows the numbers and rates of *unbelted passenger vehicle occupants* (i.e. occupants of passenger cars, light trucks, and vans) killed in Kentucky from 2009 through 2013. The number decreased each year, with a slight increase in 2012. The 2013 count (245 deaths) represents a 23.3% decrease compared to the 2009-2012 average (319 deaths), and a 30.4% decrease from the 2009 total (352 deaths).

Kentucky's 2009-2013 population-based unbelted fatality rate (6.98 deaths per 100,000 population) is higher than the rate for Region 3 (4.09), and both are higher than the National rate during the same years (3.36). Kentucky's population-based unbelted fatality rate decreased in 2013 (5.61), by 23.5% compared to the 2009-2012 average (7.33), and by 32.2% compared to the 2009 rate (8.27).

In Kentucky, *observed seat belt use* increased yearly (rising by 4.3% in 2013 when compared to 2009-2012 average), from 79.7% in 2009 to 85.0% in 2013.

In Kentucky, unbelted fatalities represented 44.5% of *all traffic-related deaths* in 2009, with this proportion fluctuating throughout the period, and ultimately decreasing in 2013. The value in 2013 (38.4%) represents a 9.3% decrease from the prior four-year average (42.3%), and a 13.7% decrease from the 2009 proportion. During the 2009-2013 period, Kentucky represented 23.8% of all unbelted fatalities in Region 3, with this proportion ultimately decreasing, by 11.8% in 2013 (21.4%) when compared to the 2009-2012 average (24.3%).

**Table 11. Kentucky Unbelted Passenger Vehicle Occupant Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	352	310	306	309	245	-30.40%	-23.26%
<b>Pop. Rate**</b>	8.27	7.23	7.09	7.11	5.61	-32.19%	-23.54%
<b>Pct of Total</b>	44.50%	40.79%	42.50%	41.42%	38.40%	-13.71%	-9.27%
<b>Pct of Region</b>	24.88%	23.68%	23.59%	24.94%	21.42%	-13.91%	-11.79%
<b>Observed Belt Use</b>	79.7%	80.3%	82.2%	83.7%	85.0%	6.24%	4.33%

\*\*Fatality rate per 100,000 population

Table 12 presents data for such fatalities in Region 3. These data indicate that unbelted occupant fatalities decreased Regionally, 13.0% in 2013 when compared to the prior four years, and by 19.2% in 2013 when compared to 2009. Similarly, the Region's population-based unbelted fatality rate decreased, by 14.8% in 2013 when compared to the 2009-2012 average. Unbelted deaths accounted for 34.2% of the Region's total traffic-related fatalities during the 2009-2013 period. The 2013 percent of total deaths represents an 8.2% decline in this proportion compared to the average of the prior four years. In Region 3, each of these indices was at its highest level in 2009 and at its lowest level in 2013.



**Table 12. Region 3 Unbelted Passenger Vehicle Occupant Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	1,415	1,309	1,297	1,239	1,144	-19.15%	-13.00%
<b>Pop. Rate**</b>	4.60	4.21	4.14	3.92	3.59	-21.95%	-14.82%
<b>Pct of Total</b>	36.16%	34.85%	35.41%	32.61%	31.93%	-11.71%	-8.15%

\*\*Fatality rate per 100,000 population

Table 13 shows that Nationally, the number of unbelted occupant deaths declined overall, from 11,545 in 2009 to a five-year low of 9,580 in 2013. The 2013 total represents a 10.3% decrease from the 2009-2012 average, and a 17.0% decrease when compared to the 2009 total. Unbelted fatalities accounted for 31.5% of the Nation's traffic-related deaths during the 2009-2013 period. This proportion decreased successively during the five years, with the 2013 proportion representing an 8.8% decrease when compared to the 2009-2012 average.

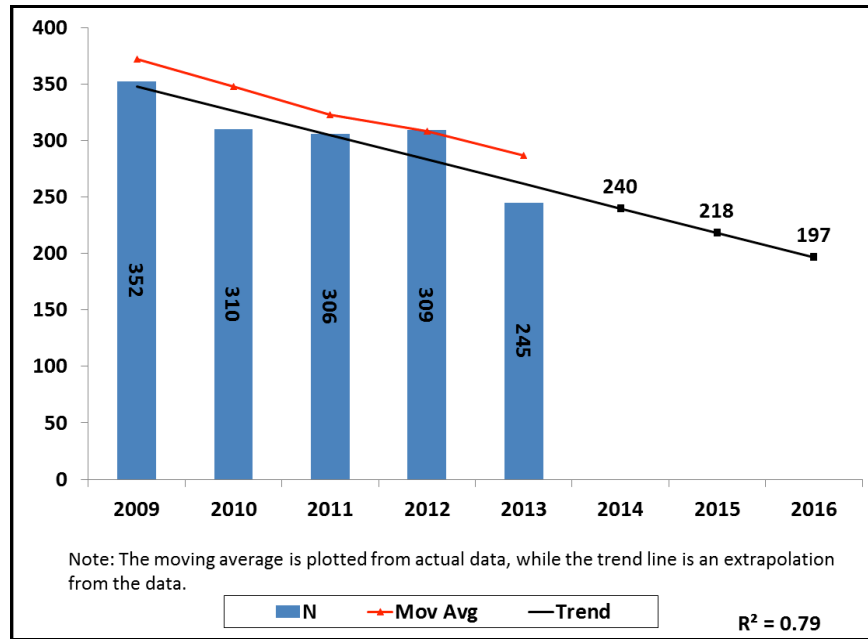
**Table 13. Nationwide Unbelted Passenger Vehicle Occupant Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	11,545	10,590	10,215	10,370	9,580	-17.02%	-10.30%
<b>Pop. Rate**</b>	3.76	3.42	3.28	3.30	3.03	-19.48%	-11.92%
<b>Pct of Total</b>	34.07%	32.09%	31.45%	30.70%	29.28%	-14.07%	-8.75%

\*\*Fatality rate per 100,000 population

The five-year trends in the *number* and *rate of unbelted occupant* fatalities in Kentucky are shown in Figures 7 and 8. With regard to fatalities (Figure 7), the linear trend projects **240** such deaths in 2014, **218** deaths in 2015, and **197** deaths in 2016. The calculated  $R^2$  value for this trendline is 0.79. The three-year moving average shows a decline.





**Figure 7. Kentucky Unbelted Passenger Vehicle Occupant Fatalities**

Figure 8 shows the declining trend for the *population-based* fatality rate for unbelted fatalities in Kentucky. This linear trend were to continue, the State's unbelted death rate would be **5.43** (deaths per 100,000 residents) in 2014, **4.88** in 2015, and **4.34** in 2016. Here, the  $R^2$  value is 0.82 and the moving average also shows a decline.



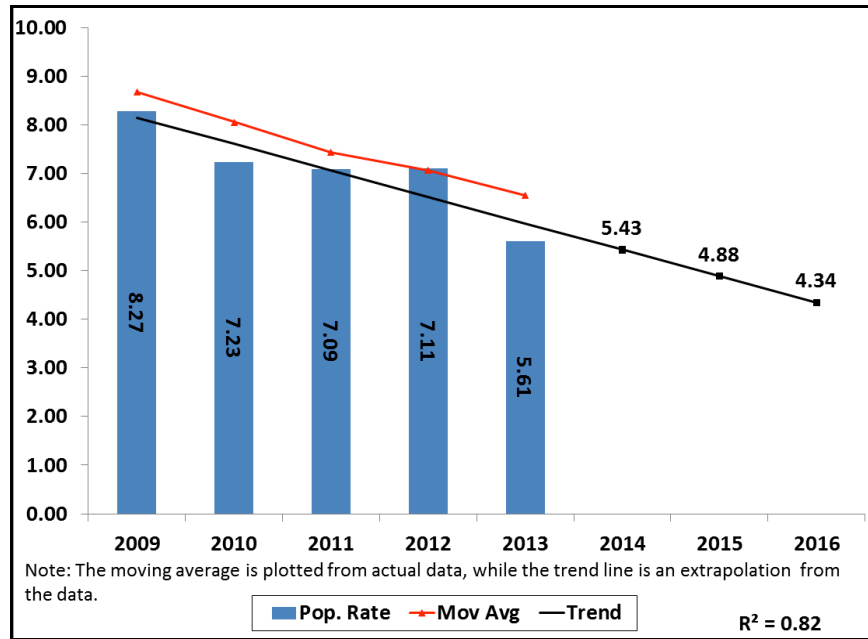


Figure 8. Kentucky Unbelted Passenger Vehicle Occupant Fatalities, Population Rate

## Motorcycle Rider Fatalities

Motorcycle riders include both operators and passengers of a motorcycle. The term “motorcyclist” also includes both the operator and the passenger.

Table 14 shows that during the 2009-2013 period in Kentucky, the *number of motorcyclist deaths* fluctuated year-by-year. The count in 2013 (87 fatalities) represents a 3.1% decrease when compared to the prior four-year average (90 deaths), but a 1.2% *increase* compared to the 2009 total (86 deaths).

Kentucky’s *population-based motorcyclist death rate* similarly fluctuated each year, but ultimately declined in 2013. The 2013 rate (1.99 deaths per 100,000 population) represents a 3.4% decrease when compared to the 2009-2012 average (2.06), and a 1.5% decrease when compared to 2009 (2.02). The population-based motorcyclist death rate in Kentucky for all five years (2.05 deaths per 100,000 residents) is higher than the Regional rate (1.52), and both are higher than the National rate (1.49) during the same timeframe.

In Kentucky, the *motorcyclist percent of total traffic-related deaths* fluctuated throughout the 2009-2013 period, but ultimately increased. The 2013 proportion (13.6%) is 14.6% higher than the 2009-2012 average (11.9%), and 25.4% higher than the 2009 proportion (10.9%). Over all five years, Kentucky motorcyclists comprised 18.8% of motorcyclists deaths in Region 3, with the 2013 percent (18.8%) representing little change (a 0.3% decline) when compared to the prior four-year average, but a decrease of 6.3% when compared to the 2009 figure (20.0%).



*Unhelmeted* motorcyclists accounted for 50 of Kentucky's motorcyclist fatalities in 2009, with this number fluctuating throughout the five-year period, from a low of 42 deaths in 2011 to a high of 68 deaths in 2012. The count in 2013 (59) represents an 8.3% increase from the 2009-2012 average (55), but a larger, 18.0% increase from the total in 2009. As a percentage of all motorcyclist deaths in the State, unhelmeted motorcyclists accounted for an average of 62.1% during the 2009-2013 period, with the 2013 proportion (67.8%) representing an 11.7% increase compared to the prior four years (60.7%).

**Table 14. Kentucky Motorcycle Rider Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	86	96	71	106	87	1.16%	-3.06%
<b>Pop. Rate*</b>	2.02	2.24	1.64	2.44	1.99	-1.45%	-3.42%
<b>Pct of Total</b>	10.87%	12.63%	9.86%	14.21%	13.64%	25.42%	14.60%
<b>Pct of Region</b>	20.00%	19.32%	15.33%	20.42%	18.75%	-6.25%	-0.30%
<b>Unhelmeted Fatalities</b>	50	58	42	68	59	18.00%	8.26%
<b>Pct Unhelmeted Fatalities</b>	58.14%	60.42%	59.15%	64.15%	67.82%	16.64%	11.68%

\* Fatality rate per 100,000 population

Table 15 provides data for such fatalities in Region 3. The number motorcyclist fatalities fluctuated across the Region during the five-year period, with the 2013 total (464 deaths) representing a 2.8% decrease when compared to the 2009-2012 average (477), but a 7.9% *increase* when compared to the 2009 count (430). The population-based fatality rate followed a similar pattern as the number of fatalities, decreasing by 4.8% in 2013 (1.46 deaths per 100,000 population) when compared to the prior four years (1.53), but *rising* by 4.2% in 2013 when compared to the 2009 proportion (1.40).

The Regional *motorcyclist percent of total deaths* increased, by 2.7% in 2013 (13.0%) compared to the 2009-2012 average (12.6%), but by a larger, 17.9% in 2013 when compared to 2009 (11.0%). The Region's number of unhelmeted deaths fluctuated during the five-year period, falling by 2.0% in 2013 (99) when compared to the 2009-2012 average (101), but increasing by 2.1% in 2013 when compared to the 2009 proportion (97). The Region's proportion motorcyclist fatalities that were *unhelmeted* similarly fluctuated, showing little change (a 0.8% increase) in 2013 (21.3%) when compared to the prior four years (21.2%), but *decreasing* by 5.4% in 2013 when compared to 2009 (22.6%).

**Table 15. Region 3 Motorcycle Rider Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	430	497	463	519	464	7.91%	-2.78%
<b>Pop. Rate*</b>	1.40	1.60	1.48	1.64	1.46	4.17%	-4.81%
<b>Pct of Total</b>	10.99%	13.23%	12.64%	13.66%	12.95%	17.85%	2.65%
<b>Unhelmeted Fatalities</b>	97	97	87	123	99	2.06%	-1.98%
<b>Pct Unhelmeted Fatalities</b>	22.6%	19.5%	18.8%	23.7%	21.3%	-5.42%	0.82%

\* Fatality rate per 100,000 population



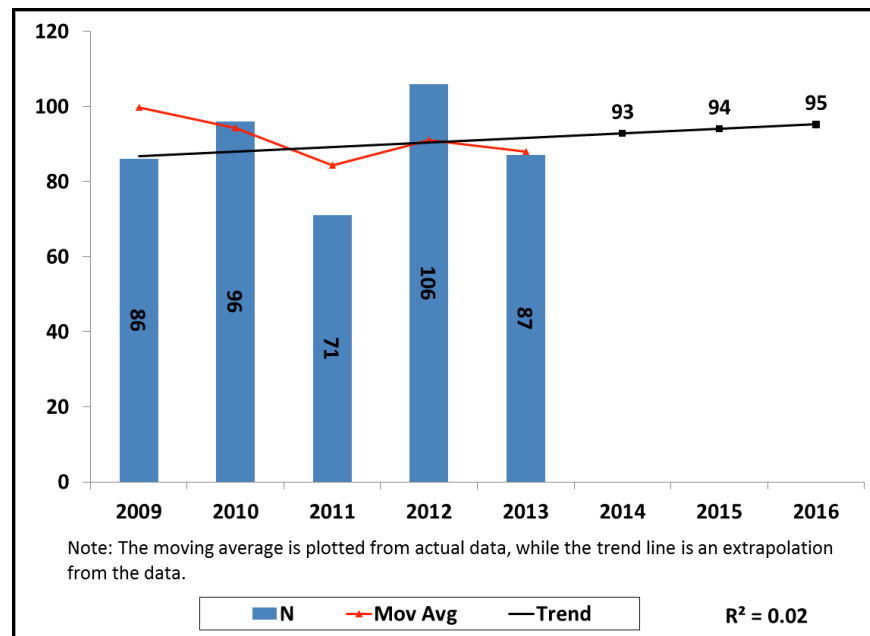
As seen in Table 16, Nationally, the number of motorcyclist fatalities and the population-based fatality rate showed minimal change in 2013 when compared to the 2009-2012 average, and the Nation's motorcyclist percent of total deaths increased slightly. During the same timeframe, throughout the U.S. the number of unhelmeted deaths decreased slightly (by 3.4%), as did the Nation's proportion of motorcyclist deaths that were *unhelmeted* (a 3.7% decrease).

**Table 16. Nationwide Motorcycle Rider Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	4,469	4,518	4,630	4,986	4,668	4.45%	0.37%
<b>Pop. Rate*</b>	1.46	1.46	1.49	1.59	1.48	1.36%	-1.45%
<b>Pct of Total</b>	13.19%	13.69%	14.26%	14.76%	14.27%	8.17%	2.11%
<b>Unhelmeted Fatalities</b>	1,915	1,868	1,852	2,039	1,854	-3.19%	-3.36%
<b>Pct Unhelmeted Fatalities</b>	42.85%	41.35%	40.00%	40.89%	39.72%	-7.31%	-3.72%

\* Fatality rate per 100,000 population

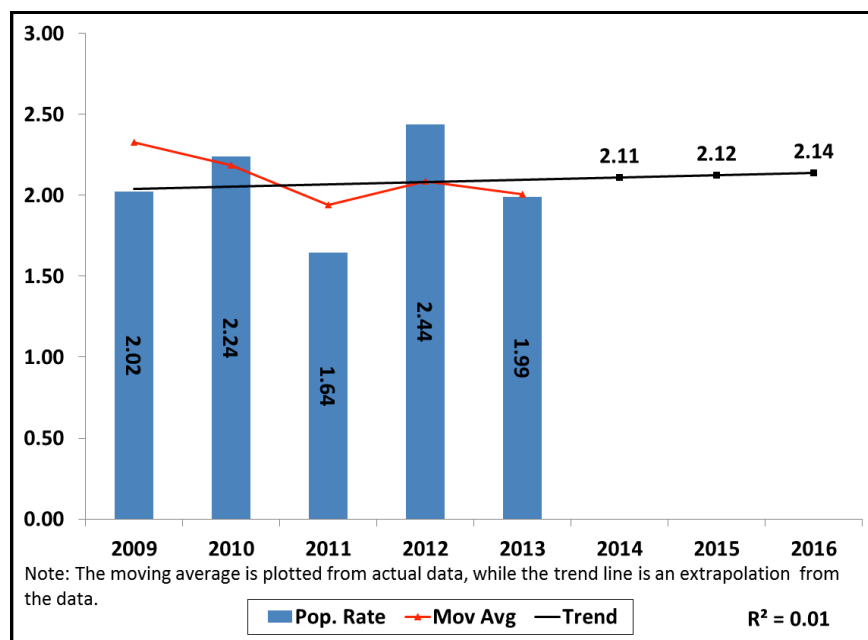
The next two figures present annual and projected motorcycle fatalities and population-based fatality rates for Kentucky. Figure 9 shows an increasing linear trend that projects **93** deaths in 2014, **94** in 2015, and **95** in 2016. The  $R^2$  value for this trendline is 0.02. The three-year moving average fluctuates throughout the period, but ultimately declines.



**Figure 9. Kentucky Motorcycle Rider Fatalities**



Figure 10 shows a similar trend for Kentucky's population-based fatality rate for motorcyclists. If this trend were to continue, there would be **2.11** such deaths per 100,000 residents in 2014, **2.12** deaths in 2015, and **2.14** in 2016. The  $R^2$  value for this trendline is 0.01 and the three-year moving average shows a similar pattern to that seen in Figure 9.



**Figure 10. Kentucky Motorcycle Rider Fatalities, Population Rate**

## Pedestrian Fatalities

Table 17 shows the *number* and *rate* of pedestrian deaths in Kentucky, both of which fluctuated during the 2009-2013 period, but ultimately increased. Overall, the number of pedestrians deaths in Kentucky in 2013 (55 fatalities) represents a 9.5% increase when compared to the prior four-year average (50 fatalities), and a larger, 34.2% increase when compared to the 2009 figure (41 fatalities). The State's population-based pedestrian fatality rate also rose in 2013 (1.25 deaths per 100,000 population), by 8.4% when compared to the prior four-year average (1.15), and by 31.8% when compared to the 2009 rate (0.95). Over all five years, Kentucky's population-based death rate for pedestrians (1.17) was lower both the Regional rate (1.46) and the National rate (1.44).

Throughout the five years shown in Table 17, pedestrians accounted for 7.0% of all traffic-related deaths in Kentucky, with this number fluctuating throughout the 2009-2013 period, but ultimately increasing to its highest point of the period in 2013. The 2013 percentage (8.6%) represents a 29.4% increase in this index when compared to the 2009-2012 average (6.7%), but a larger, 66.3% increase when compared to the 2009 proportion (5.2%).



Kentucky pedestrian fatalities accounted for 11.2% of all Region 3 pedestrian deaths throughout the 2009-2013 period, with the percentage in 2013 (11.6%) representing an increase of 5.2% when compared to the prior four years (11.1%), and a larger increase of 20.5% when compared to 2009 (9.7%).

**Table 17. Kentucky Pedestrian Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	41	61	50	49	55	34.15%	9.45%
<b>Pop. Rate*</b>	0.95	1.40	1.14	1.12	1.25	31.76%	8.41%
<b>Pct of Total</b>	5.18%	8.03%	6.94%	6.57%	8.62%	66.32%	29.40%
<b>Pct of Region</b>	9.65%	13.47%	11.57%	9.65%	11.63%	20.53%	5.17%

\* Fatality rate per 100,000 population

Table 18 shows that the number of pedestrian fatalities across Region 3 fluctuated, but ultimately increased, by 4.1% when compared to the average of the prior four years, and by 11.3% in 2013 when compared to 2009. The Regional population-based fatality rate increased in 2013 as well (by 1.9%), as did the Region's proportion of pedestrian fatalities to total traffic fatalities (a 9.9% increase). Again, these changes in 2013 are relative to the respective prior four-year average. Throughout the 2009-2013 period, pedestrians accounted for 7.0% of Kentucky's traffic-related deaths, 12.2% of the Region's, and 13.5% of the Nation's.

**Table 18. Region 3 Pedestrian Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	425	453	432	508	473	11.29%	4.07%
<b>Pop. Rate*</b>	1.38	1.46	1.38	1.61	1.48	7.44%	1.89%
<b>Pct of Total</b>	10.86%	12.06%	11.79%	13.37%	13.20%	21.54%	9.88%

\* Fatality rate per 100,000 population

Table 19 indicates that Nationwide, pedestrians accounted for an average of 4,484 deaths throughout the 2009-2013 period. Nationwide, pedestrian fatalities increased by 7.1% and the population-based fatality rate increased by 5.2%, each in 2013 when compared to the respective 2009-2012 average. Across the U.S., pedestrians accounted for 13.5% of all 2009-2013 traffic-related fatalities, with the 2013 proportion representing a 9.0% increase when compared to the average of the prior four years.

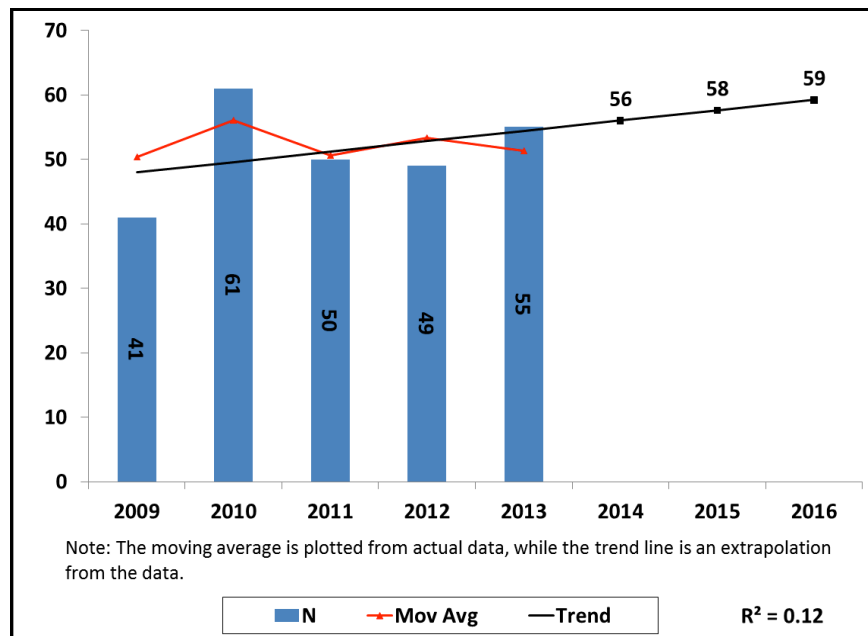


**Table 19. Nationwide Pedestrian Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs.2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	4,109	4,302	4,457	4,818	4,735	15.23%	7.09%
<b>Pop. Rate*</b>	1.34	1.39	1.43	1.53	1.50	11.82%	5.15%
<b>Pct of Total</b>	12.13%	13.04%	13.72%	14.26%	14.47%	19.33%	8.95%

\*Fatality rate per 100,000 population

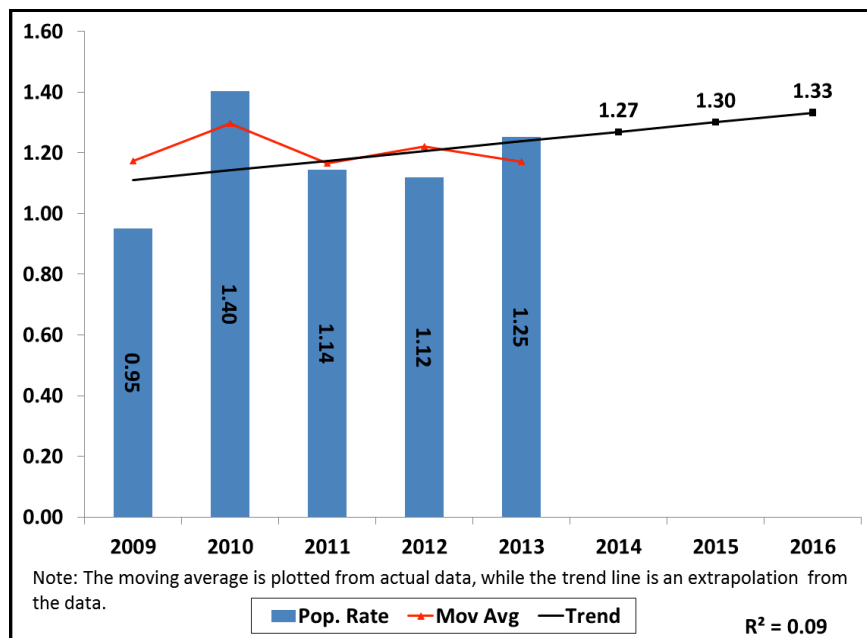
The trends in the *numbers* and *rates* of pedestrian fatalities in Kentucky are shown in Figures 11 and 12, respectively. Figure 11 shows an inclining linear trend for the *number* of pedestrian deaths, projecting **56** such deaths in 2014, **58** in 2015, and **59** in 2016. The  $R^2$  value for this trendline is 0.12. The three-year moving average fluctuates throughout the period.



**Figure 11. Kentucky Pedestrian Fatalities**



Figure 12 shows an upward trend for Kentucky's *population-based pedestrian fatality rate*, projecting **1.27** deaths per 100,000 residents in 2014, **1.30** in 2015, and **1.33** in 2016. Here, the  $R^2$  value is 0.09 and the three-year moving average follows the same pattern observed in Figure 11, above.



**Figure 12. Kentucky Pedestrian Fatalities, Population Rate**

## Bicyclist Fatalities

Table 20 presents the number and rate of bicyclist fatalities in Kentucky for the 2009-2013 period. Tables 21 and 22 provide such data for Region 3 and the U.S., respectively. Throughout all five years, bicyclist fatalities accounted for 0.6% of all traffic-related fatalities in Kentucky; 1.3% across the Region; and 2.1% Nationwide.

With regard to change, there were 3 bicyclist fatalities in Kentucky in 2013, representing a 40.0% decrease when compared to the prior four-year average and the count in 2009 (5 deaths each). To compare, bicyclist fatalities decreased by 17.6% Regionally and increased Nationally by 11.4%, each in 2013 when compared to the respective prior four-year average.

Across all five years, Kentucky's *population-based bicyclist fatality rate* (0.11 deaths per 100,000 population) was lower than that of the Regional rate (0.15), and both were lower than the National rate (0.22). In Kentucky, the annual population-based bicyclist fatality rate fluctuated throughout the period, but ultimately decreased in 2013 (0.07), by 40.6% when compared to the 2009-2012 average (0.11), and by 41.1% 2013 when compared to 2009 (0.12). The Region experienced a 19.3% decrease in the bicyclist population-based fatality rate when comparing 2013 with the 2009-2012 average, while the Nation saw a 9.4% increase in this index.



In Kentucky, bicyclist fatalities similarly fluctuated as a percent of total fatalities, but ultimately decreased in 2013. The count in 2013 (0.5%) represents a 29.1% decrease when compared to the prior four years (0.7%). Across the Region, bicyclist fatalities decreased by 13.0% as a percent of total fatalities when comparing 2013 with the prior four years, while this proportion increased by 13.4% throughout the U.S. as a whole.

Throughout the entire 2009-2013 period, Kentucky bicyclists accounted for 9.6% of all bicyclist fatalities across Region 3, ranging from 5.1% in 2011 to 12.1% in 2010. The 2013 proportion (7.3%) represents a decrease of 27.2% when compared to the prior four-year average (10.1%).

**Table 20. Kentucky Bicyclist Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	5	7	2	6	3	-40.00%	-40.00%
<b>Pop. Rate*</b>	0.12	0.16	0.05	0.14	0.07	-41.07%	-40.57%
<b>Pct of Total</b>	0.63%	0.92%	0.28%	0.80%	0.47%	-25.61%	-29.07%
<b>Pct of Region</b>	10.42%	12.07%	5.13%	11.11%	7.32%	-29.76%	-27.20%

\* Fatality rate per 100,000 population

**Table 21. Region 3 Bicyclist Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	48	58	39	54	41	-14.58%	-17.59%
<b>Pop. Rate*</b>	0.16	0.19	0.12	0.17	0.13	-17.54%	-19.31%
<b>Pct of Total</b>	1.23%	1.54%	1.06%	1.42%	1.14%	-6.72%	-12.99%

\* Fatality rate per 100,000 population

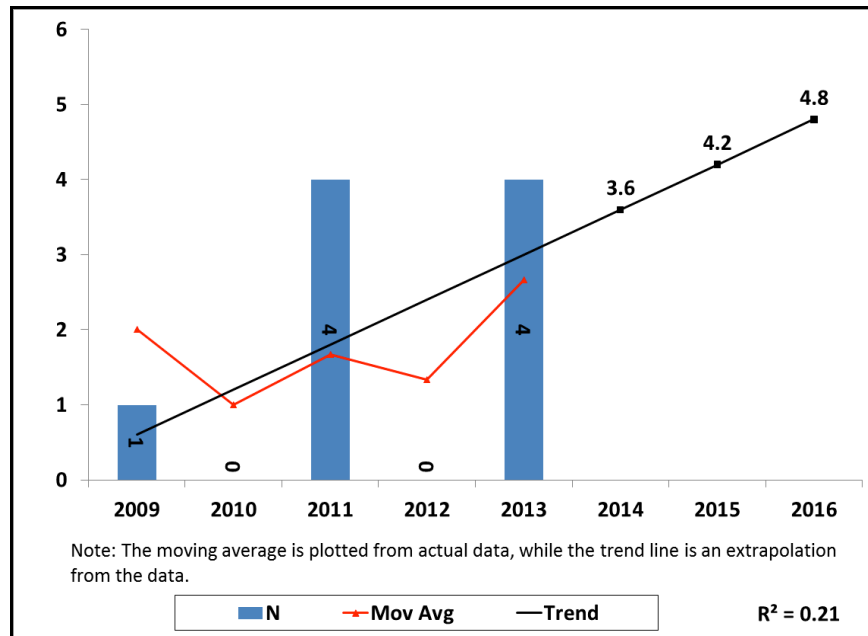
**Table 22. Nationwide Bicyclist Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	628	623	682	734	743	18.31%	11.44%
<b>Pop. Rate*</b>	0.20	0.20	0.22	0.23	0.24	14.81%	9.42%
<b>Pct of Total</b>	1.85%	1.89%	2.10%	2.17%	2.27%	22.52%	13.37%

\* Fatality rate per 100,000 population



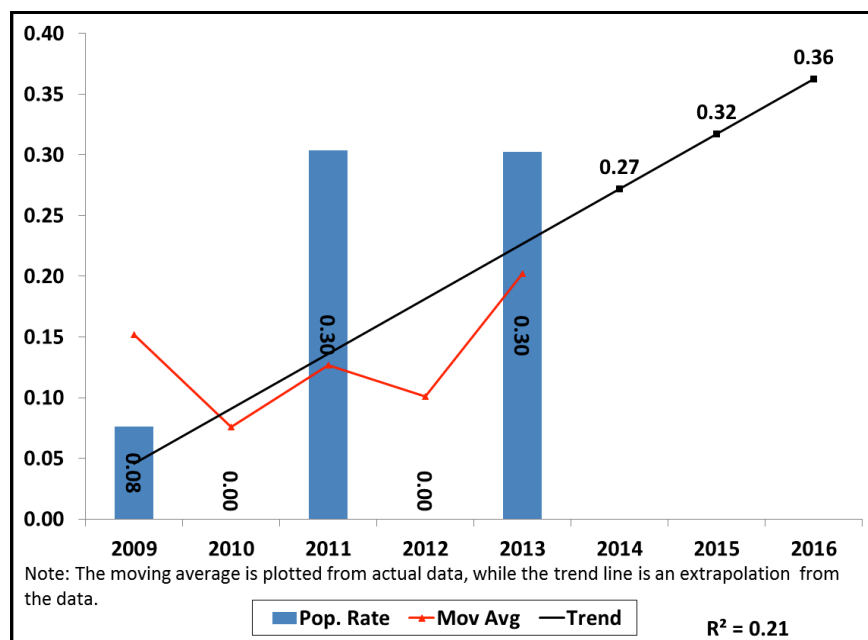
Figure 13 and Figure 14 show trends in the *number* and *rate* of bicyclist fatalities in Kentucky. Figure 13 suggests that if the linear trend were to continue, there would be **3.6** such deaths in 2014, **4.2** in 2015, and **4.8** in 2016. These figures have been extended by one decimal place to better illustrate the change. The  $R^2$  value for this trendline is 0.21. The three-year moving average fluctuates throughout the period, ultimately increasing.



**Figure 13. Kentucky Bicyclist Fatalities**



Figure 14 shows a similar pattern for Kentucky's population-based bicyclist fatality rate. The linear trendline projects **0.27** deaths per 100,000 residents in 2014, **0.32** in 2015, and **0.36** in 2016. The  $R^2$  value for this trendline is 0.21 and the three-year moving average follows the same pattern as that above.



**Figure 14. Kentucky Bicyclist Fatalities, Population Rate**

## Fatalities Involving Young Drivers

Table 23 shows the number of fatalities (all ages) resulting from Kentucky crashes involving a driver between 16 and 20 years of age. In 2009, there were 132 such deaths, with this number decreasing throughout the five-year period. The number of young driver-involved deaths in 2013 (84) represents a 20.6% decrease compared to the 2009-2012 average (106), and a 36.4% decrease compared to the 2009 total.

In Kentucky, the young driver-involved population-based fatality rate followed a similar pattern as the number of fatalities, with the 2013 rate (1.91 deaths per 100,000 population) representing a 21.3% decrease when compared to the prior four-year average (2.43), and a 37.5% decrease from the 2009 rate (3.06). Throughout the five-year period, the young driver-involved population-based death rate in Kentucky (2.32 deaths per 100,000 residents) was higher than both the Regional rate (1.67) and the National rate (1.54).

In 2009, 16.7% of all traffic-related fatalities in Kentucky involved young drivers; this proportion decreased consecutively each year to a low of 11.7% in 2012, before increasing to 13.2% in 2013. The 2013 proportion represents a 6.1% decrease compared to the 2009-2012 average (14.0%), and a 21.1% decrease compared to the 2009 proportion.



Kentucky's young driver-involved fatalities fluctuated as a percent of such deaths across Region 3, increasing by 2.0% in 2013 (19.7%) when compared to the prior four years (19.3%), but *decreasing* by 4.6% in 2013 when compared to 2009 (20.6%). During all five years, Kentucky accounted for 19.4% Region 3's young driver-involved fatalities.

**Table 23. Kentucky Young Driver-Involved Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	132	112	92	87	84	-36.36%	-20.57%
<b>Pop. Rate*</b>	3.06	2.58	2.11	1.99	1.91	-37.50%	-21.33%
<b>Pct of Total</b>	16.69%	14.74%	12.78%	11.66%	13.17%	-21.10%	-6.09%
<b>Pct of Region</b>	20.63%	20.25%	17.86%	17.94%	19.67%	-4.62%	1.99%

\* Fatality rate per 100,000 population

Table 24 shows that young driver-involved deaths decreased Regionally, as they did in Kentucky. The 2013 total represents a 22.1% decrease from the prior four-year average, and a 33.3% decrease from the 2009 total. In 2013, the Region's population-based young driver-involved fatality rate similarly decreased, by 23.8% compared to the 2009-2012 average, and by 35.6% compared to the 2009 rate. Young driver-involved fatalities accounted for 14.0% of all Region 3 traffic-related deaths in throughout the five-year period (2009-2013). The 2013 proportion represents a decrease of 17.8% compared to the prior four-year average, and a decrease of 27.1% compared to the 2009 proportion.

**Table 24. Region 3 Young Driver-Involved Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	640	553	515	485	427	-33.28%	-22.12%
<b>Pop. Rate*</b>	2.08	1.78	1.64	1.53	1.34	-35.59%	-23.75%
<b>Pct of Total</b>	16.36%	14.72%	14.06%	12.76%	11.92%	-27.14%	-17.77%

\* Fatality rate per 100,000 population

Table 25 shows that young driver-involved fatalities also decreased Nationally, by 14.2% in 2013 compared to the 2009-2012 average, and by 23.4% in 2013 when compared to the 2009 total; this number decreased successively each year.

The young driver-involved population-based fatality rate decreased Nationally as well, by 15.7% in 2013 when compared to the prior four years, and by 25.6% in 2013 when compared to that in 2009. Again, this figure decreased year-by-year throughout the period observed.

Young driver-involved deaths accounted for 14.5% of all deaths across the U.S. from 2009 through 2013, declining from 16.4% in 2009 to 13.0% in 2013.

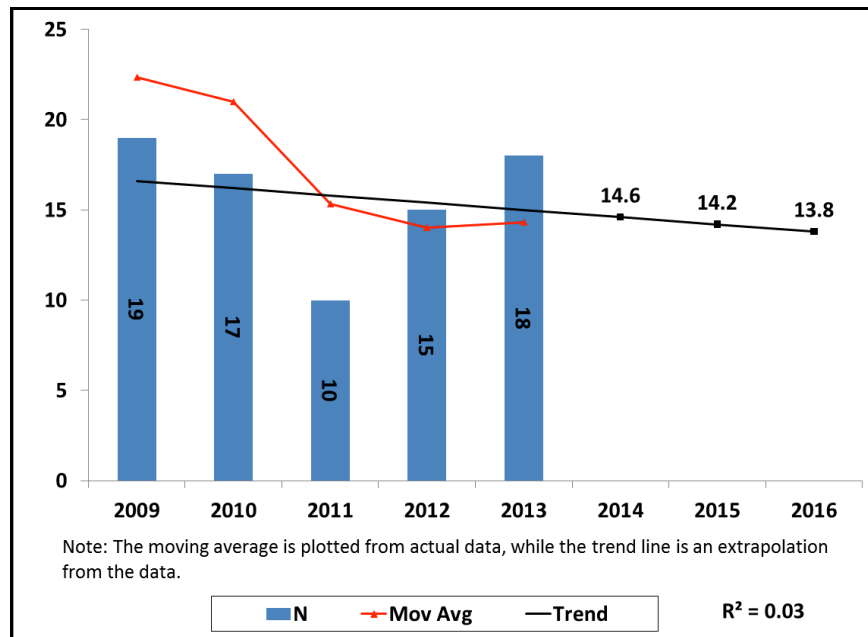


**Table 25. Nationwide Young Driver-Involved Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	5,544	4,936	4,726	4,596	4,248	-23.38%	-14.19%
<b>Pop. Rate*</b>	1.81	1.60	1.52	1.46	1.34	-25.64%	-15.74%
<b>Pct of Total</b>	16.36%	14.96%	14.55%	13.60%	12.98%	-20.65%	-12.70%

\* Fatality rate per 100,000 population

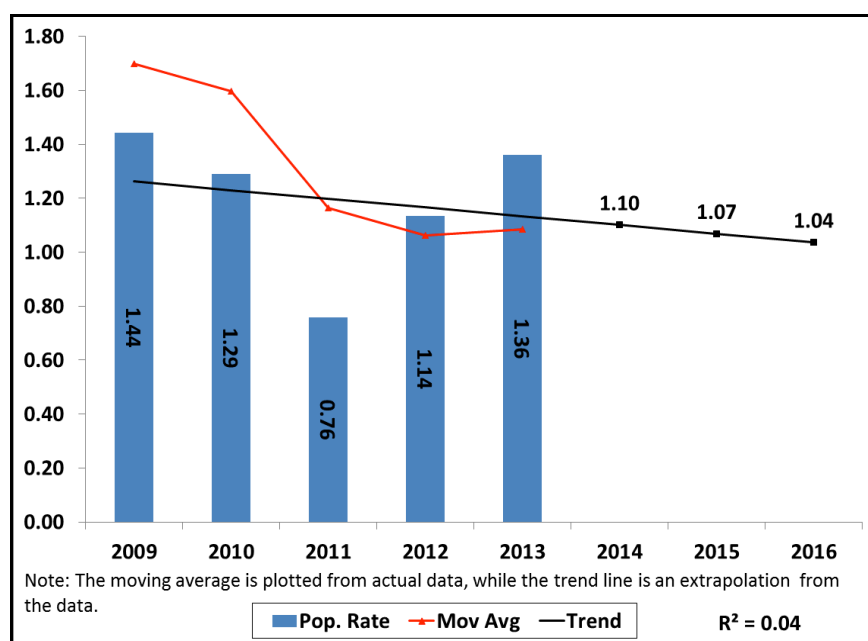
Figure 15 shows the trend in Kentucky's young driver-involved fatalities. If this trend were to continue, there would be **14.6** such fatalities in 2014, **14.2** in 2015, and **13.8** in 2016. These figures have been extended by one decimal place to better illustrate the change. The calculated  $R^2$  value for this trendline is 0.03. The three-year moving average initially declines sharply, which reflects higher fatality counts in previous years not shown on this graph, and shows a slight increase at the end of the period.



**Figure 15. Kentucky Young Driver-Involved Fatalities**



Figure 16 presents the trend for the population-based fatality rate. The linear trendline projects **1.10** deaths per 100,000 residents in 2014, **1.07** in 2015, and **1.04** in 2016. Here, the  $R^2$  value is 0.04. The three-year moving average shows a similar pattern as that seen in Figure 15.



**Figure 16. Kentucky Young Driver-Involved Fatalities, Population Rate**

## Fatalities Involving Older Drivers (Ages 65 and Above)

Tables 26, 27, and 28 show the numbers and rates of fatalities in crashes involving drivers ages 65 and above in Kentucky, across Region 3, and throughout the U.S., respectively.

Table 26 shows that the number of older driver-involved deaths in Kentucky fluctuated somewhat throughout the period, ranging from a high of 143 fatalities in 2009 to a low of 117 fatalities in 2011. The 2013 total (136) represents a 2.6% increase when compared to the prior four-year average (133), but a 4.9% *decrease* when compared to the count in 2009.

Kentucky's older driver-involved population-based fatality rate varied as well. The 2013 rate (3.09) is 1.7% higher than the 2009-2012 average (3.04), but 6.6% *lower* than the 2009 rate (3.31). Kentucky's older driver-involved population death rate for all five years (3.05 deaths per 100,000 population) is higher than the Regional rate (2.14), and both are higher than the National rate (1.86) for the same timeframe.

Table 26 shows that in Kentucky, the older driver proportion of all fatalities increased in 2013 (21.3%), by 21.3% compared to the prior four-year average (17.6%), and by 17.9% compared to the 2009 value (18.1%).



Kentucky's older driver-involved deaths accounted for 19.9% of such deaths across Region 3 during the 2009-2013 period, with this proportion fluctuating throughout the five years, but ultimately decreasing. The 2013 value (19.4%) shows a 3.3% decrease when compared to the prior four years (20.0%), and a 9.2% decrease compared to the 2009 proportion (21.3%).

**Table 26. Kentucky Older Driver-Involved Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	143	132	117	138	136	-4.90%	2.64%
<b>Pop. Rate*</b>	3.31	3.04	2.68	3.15	3.09	-6.59%	1.66%
<b>Pct of Total</b>	18.08%	17.37%	16.25%	18.50%	21.32%	17.91%	21.34%
<b>Pct of Region</b>	21.34%	19.97%	18.28%	20.47%	19.37%	-9.23%	-3.32%

\* Fatality rate per 100,000 population

Table 27 shows that for Region 3, the number of older driver-involved deaths fluctuated throughout the period, but ultimately increased. The 2013 total represents a 6.2% increase from the 2009-2012 average, and a 4.8% increase from the 2009 total.

In Region 3, the older driver-involved population-based fatality rate fluctuated somewhat as well, but again ultimately increased. The 2013 rate (per 100,000 residents) represents a 3.9% increase when compared to the prior four-year average, and a 1.1% increase compared to the 2009 value.

Overall, older driver-involved deaths accounted for 17.9% of all 2009-2013 traffic-related fatalities in Region 3, with this proportion ultimately increasing in 2013. The 2013 proportion represents a 12.1% increase compared to the 2009-2012 average, and a 14.4% increase compared to the 2009 proportion.

**Table 27. Region 3 Older Driver-Involved Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	670	661	640	674	702	4.78%	6.16%
<b>Pop. Rate*</b>	2.18	2.13	2.04	2.13	2.20	1.14%	3.94%
<b>Pct of Total</b>	17.12%	17.60%	17.47%	17.74%	19.59%	14.43%	12.09%

\* Fatality rate per 100,000 population

Table 28 shows that Nationwide, the fatality count ultimately *increasing* to its highest point of the period in 2013. The 2013 number is 4.7% higher than the average of the prior four years, and 7.1% higher than the 2009 count.

The U.S. population-based fatality rate followed a similar pattern as the number of fatalities, fluctuating mildly but peaking in 2013. The 2013 rate of 1.90 deaths per 100,000 population



represents an increase of 2.8% from the 2009-2012 average, and an increase of 4.0% from the 2009 value.

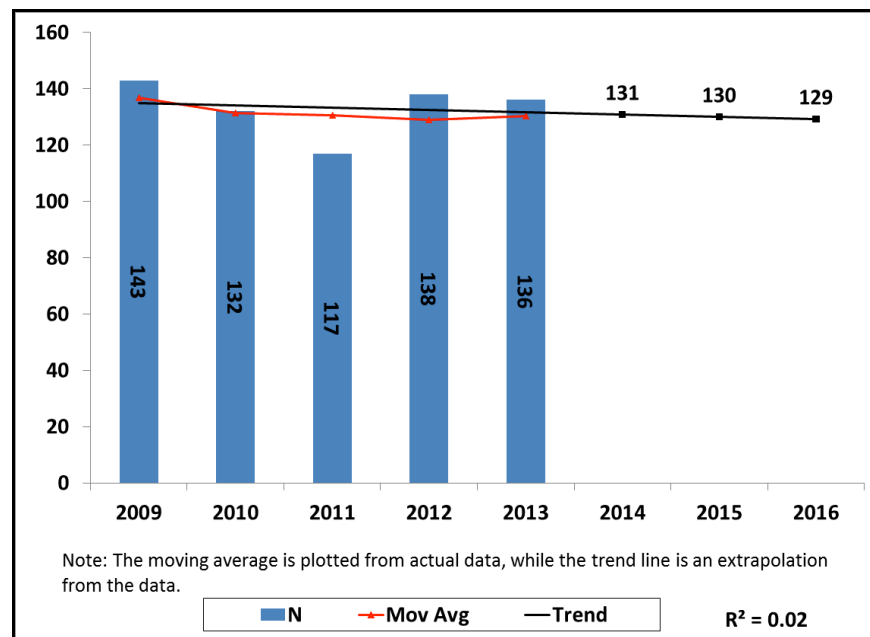
Throughout the five years, older driver-involved deaths accounted for 17.5% all traffic deaths in the U.S., with this proportion increasing throughout the period, by 6.5% in 2013 compared to the prior four-year average, and by 11.0% in 2013 when compared to the 2009 value.

**Table 28. Nationwide Older Driver-Involved Fatalities**

	2009	2010	2011	2012	2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Fatalities</b>	5,613	5,782	5,636	5,940	6,014	7.14%	4.72%
<b>Pop. Rate*</b>	1.83	1.87	1.81	1.89	1.90	3.97%	2.83%
<b>Pct of Total</b>	16.57%	17.52%	17.35%	17.58%	18.38%	10.96%	6.54%

\*Fatality rate per 100,000 population

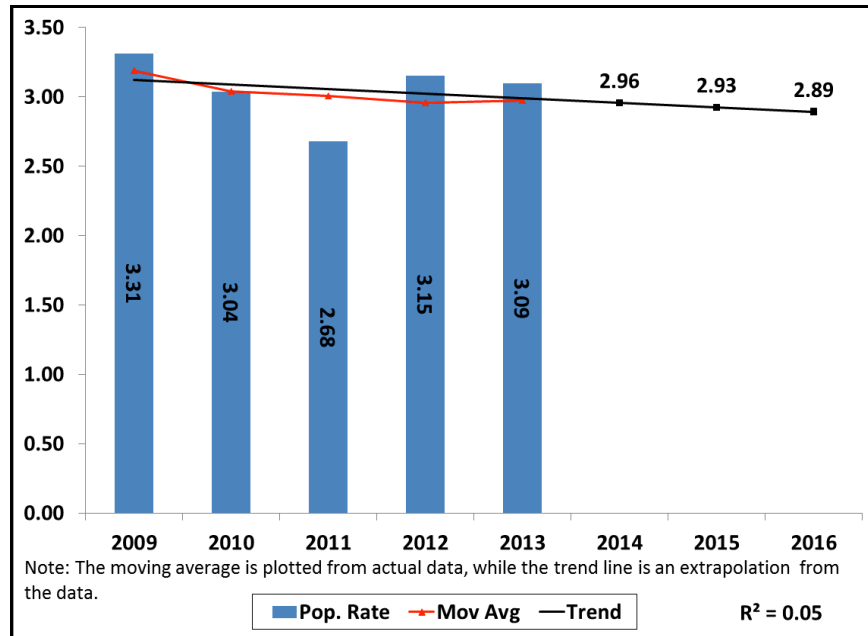
Figure 17 shows the trend for Kentucky's older driver-involved fatalities. If this trend were to continue, there would be **131** such fatalities in 2014, **130** in 2015, and **129** in 2016. The calculated  $R^2$  value for this trendline is 0.02, and the three-year moving average remains relatively stable throughout the period, showing little change.



**Figure 17. Kentucky Older Driver-Involved Fatalities**



Figure 18 shows the trend for Kentucky's older driver-involved population-based fatality rate. If this trend were to continue, there would be **2.96** fatalities per 100,000 population in 2014, **2.93** in 2015, and **2.89** in 2016. The  $R^2$  value here is 0.05. The three-year moving average follows a similar pattern as that seen in the previous figure.



**Figure 18. Kentucky Older Driver-Involved Fatalities, Population Rate**



## **EMPHASIS AREA DATA PROFILES**



## **I. FATALITIES**



## FATALITIES – KEY FINDINGS

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### In the period 2009-2013:

- Overall fatalities decreased in Kentucky, by 15.4% in 2013 when compared to the prior four years; to compare, overall fatalities decreased across Region 3 (-5.3%) throughout the U.S. as a whole (-1.7%). In 2013, Kentucky saw the largest decreases in bicyclist fatalities (-40.0%), unrestrained passenger fatalities (-23.3%), and young driver-involved fatalities (-20.6%). During the same years, the State saw increases in just two categories: pedestrian (+9.5%) and older driver-involved fatalities (+2.6%) (Table 29).
- Of the 119 counties in the State, five counties accounted for 20.2% of fatalities during the 2009-2013 period: Jefferson (9.4%); Fayette (3.3%); Pike (2.7%); Hardin (2.4%); and Warren (2.4%) (Table 30).
- The five counties that averaged the highest population-based fatality rates during the five-year period (per 100,000 population) were: Gallatin (46.84); Clay (44.33); Wolfe (43.89); Knott (40.63); and Carlisle (39.53) (Table 31).
- Persons ages 25-34 constituted a plurality of fatalities in Kentucky for the years 2009 through 2013 (18.3%). Similarly, throughout the Region and the Nation, persons ages 25-34 made up the plurality of fatalities (17.5% and 17.1%, respectively). In Kentucky, however, persons ages 21-24 had the highest population-based fatality rate, with 27.79 fatalities per 100,000 population. Males constituted 67.0% of Kentucky's traffic-related fatalities, compared to 70.5% in Region 3, and 70.4% Nationwide (Table 32).
- At the time this report was produced, 2013 race and Hispanic origin data were not available (Table 33).
- The largest percentage of 2009-2013 traffic fatalities occurred on arterial roads, in Kentucky (36.7%), across Region 3 (42.5%), and throughout the U.S. as a whole (44.0%). In Kentucky, collector roads saw the next highest proportion (34.8%), followed by local roads (17.7%). In all three jurisdictions (State, Region, and Nation) the smallest proportion of traffic-related fatalities occurred on interstates/expressways (10.8%, 12.3%, and 16.0%, respectively) (Table 34).



Table 29. Fatalities by Type

	2009	2010	2011	2012	2013	Total 2009 - 2013	% Change: 2013 vs. 2009	% Change: 2013 vs. prior 4-yr Avg.
<b>Total Fatalities†</b>								
Kentucky	791	760	720	746	638	3,655	-19.34%	-15.41%
Region	3,913	3,756	3,663	3,800	3,583	18,715	-8.43%	-5.29%
U.S.	33,883	32,999	32,479	33,782	32,719	165,862	-3.44%	-1.70%
<b>Driver Fatalities*</b>								
Kentucky	591	524	512	541	453	2,621	-23.35%	-16.42%
Region	2,655	2,475	2,463	2,532	2,425	12,550	-8.66%	-4.20%
U.S.	21,835	21,072	20,815	21,490	20,871	106,083	-4.41%	-2.03%
<b>Passenger Fatalities*</b>								
Kentucky	154	168	148	144	124	738	-19.48%	-19.22%
Region	769	759	706	681	632	3,547	-17.82%	-13.28%
U.S.	7,097	6,761	6,256	6,436	6,111	32,661	-13.89%	-7.93%
<b>Motorcyclist Fatalities</b>								
Kentucky	86	96	71	106	87	446	1.16%	-3.06%
Region	430	497	463	519	464	2,373	7.91%	-2.78%
U.S.	4,469	4,518	4,630	4,986	4,668	23,271	4.45%	0.37%
<b>Pedestrian Fatalities</b>								
Kentucky	41	61	50	49	55	256	34.15%	9.45%
Region	425	453	432	508	473	2,291	11.29%	4.07%
U.S.	4,109	4,302	4,457	4,818	4,735	22,421	15.23%	7.09%
<b>Bicyclist Fatalities</b>								
Kentucky	5	7	2	6	3	23	-40.00%	-40.00%
Region	48	58	39	54	41	240	-14.58%	-17.59%
U.S.	628	623	682	734	743	3,410	18.31%	11.44%
<b>Impaired Driving Fatalities</b>								
Kentucky	192	168	172	169	167	868	-13.02%	-4.71%
Region	1,126	1,048	1,062	1,046	1,069	5,351	-5.06%	-0.14%
U.S.	10,759	10,136	9,865	10,336	10,076	51,172	-6.35%	-1.93%
<b>Speeding Fatalities</b>								
Kentucky	154	154	141	151	125	725	-18.83%	-16.67%
Region	1,179	1,257	1,205	1,261	994	5,896	-15.69%	-18.89%
U.S.	10,664	10,508	10,001	10,329	9,613	51,115	-9.86%	-7.35%
<b>Unrestrained Occupant Fatalities</b>								
Kentucky	352	310	306	309	245	1,522	-30.40%	-23.26%
Region	1,415	1,309	1,297	1,239	1,144	6,404	-19.15%	-13.00%
U.S.	11,545	10,590	10,215	10,370	9,580	52,300	-17.02%	-10.30%
<b>Young Driver-Involved Fatalities</b>								
Kentucky	132	112	92	87	84	507	-36.36%	-20.57%
Region	640	553	515	485	427	2,620	-33.28%	-22.12%
U.S.	5,544	4,936	4,726	4,596	4,248	24,050	-23.38%	-14.19%
<b>Older Driver-Involved Fatalities</b>								
Kentucky	143	132	117	138	136	666	-4.90%	2.64%
Region	670	661	640	674	702	3,347	4.78%	6.16%
U.S.	5,613	5,782	5,636	5,940	6,014	28,985	7.14%	4.72%

\* Fatality types cross multiple categories; therefore, some fatalities contribute to multiple categories (rows) in this table.

† Total includes unknown occupant fatalities



**Table 30. Fatalities by County**

<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total 2009 - 2013</b>	
						<b>N</b>	<b>%</b>
Adair	8	2	6	4	3	23	0.6%
Allen	3	2	3	5	6	19	0.5%
Anderson	3	2	4	2	0	11	0.3%
Ballard	3	0	2	1	4	10	0.3%
Barren	17	15	15	9	11	67	1.8%
Bath	5	6	4	3	3	21	0.6%
Bell	7	7	2	4	7	27	0.7%
Boone	15	11	10	18	9	63	1.7%
Bourbon	9	2	3	1	2	17	0.5%
Boyd	2	10	6	6	4	28	0.8%
Boyle	1	7	8	2	2	20	0.5%
Bracken	0	0	2	3	1	6	0.2%
Breathitt	3	8	4	5	5	25	0.7%
Breckinridge	5	9	3	3	7	27	0.7%
Bullitt	12	12	6	7	7	44	1.2%
Butler	1	2	11	2	3	19	0.5%
Caldwell	1	2	3	2	3	11	0.3%
Calloway	12	8	8	8	9	45	1.2%
Campbell	3	8	7	12	5	35	1.0%
Carlisle	0	3	3	2	2	10	0.3%
Carroll	7	1	2	6	3	19	0.5%
Carter	6	9	6	10	4	35	1.0%
Casey	5	3	3	4	6	21	0.6%
Christian	11	17	11	9	10	58	1.6%
Clark	6	5	6	6	4	27	0.7%
Clay	9	11	12	10	6	48	1.3%
Clinton	3	5	4	3	1	16	0.4%
Crittenden	1	5	2	2	2	12	0.3%
Cumberland	1	4	3	0	1	9	0.2%
Daviess	11	13	7	8	8	47	1.3%
Edmonson	3	2	4	4	1	14	0.4%
Elliott	5	2	1	1	0	9	0.2%
Estill	0	7	3	0	8	18	0.5%
Fayette	23	24	32	25	18	122	3.3%
Fleming	4	4	3	1	6	18	0.5%
Floyd	12	6	12	13	11	54	1.5%
Franklin	4	12	8	5	3	32	0.9%
Fulton	1	2	1	3	1	8	0.2%
Gallatin	6	5	2	3	4	20	0.5%
Garrard	3	2	3	5	2	15	0.4%
Grant	6	8	5	7	2	28	0.8%
Graves	7	6	9	6	8	36	1.0%
Grayson	8	4	3	12	6	33	0.9%
Green	5	3	1	1	7	17	0.5%
Greenup	5	5	8	6	3	27	0.7%
Hancock	4	1	3	1	0	9	0.2%
Hardin	19	18	13	18	20	88	2.4%



County	2009	2010	2011	2012	2013	Total 2009 - 2013 N %
Harlan	14	6	10	3	4	37 1.0%
Harrison	4	5	4	9	5	27 0.7%
Hart	6	12	7	6	2	33 0.9%
Henderson	11	9	6	4	4	34 0.9%
Henry	2	3	2	0	2	9 0.2%
Hickman	0	1	6	1	1	9 0.2%
Hopkins	10	7	6	9	5	37 1.0%
Jackson	2	4	3	2	3	14 0.4%
Jefferson	57	73	61	65	88	344 9.4%
Jessamine	8	4	3	3	6	24 0.7%
Johnson	3	3	3	4	3	16 0.4%
Kenton	12	9	12	8	5	46 1.3%
Knott	7	6	8	7	5	33 0.9%
Knox	11	9	7	15	7	49 1.3%
Larue	3	2	1	6	1	13 0.4%
Laurel	14	19	8	17	13	71 1.9%
Lawrence	4	5	1	4	6	20 0.5%
Lee	2	4	1	2	1	10 0.3%
Leslie	2	2	2	1	2	9 0.2%
Letcher	6	8	7	2	4	27 0.7%
Lewis	4	1	3	4	4	16 0.4%
Lincoln	12	12	4	3	2	33 0.9%
Livingston	5	2	0	1	2	10 0.3%
Logan	10	4	5	8	10	37 1.0%
Lyon	1	2	2	3	3	11 0.3%
Madison	12	20	15	13	12	72 2.0%
Magoffin	2	2	3	4	4	15 0.4%
Marion	4	5	9	8	5	31 0.8%
Marshall	13	4	9	10	6	42 1.1%
Martin	0	4	3	3	0	10 0.3%
Mason	5	3	4	4	8	24 0.7%
McCracken	10	16	12	19	7	64 1.8%
McCreary	1	1	2	3	4	11 0.3%
McLean	0	2	1	1	1	5 0.1%
Meade	12	8	4	5	6	35 1.0%
Menifee	0	2	3	0	0	5 0.1%
Mercer	5	3	5	4	1	18 0.5%
Metcalfe	5	3	3	2	4	17 0.5%
Monroe	1	1	2	5	0	9 0.2%
Montgomery	13	4	3	4	2	26 0.7%
Morgan	3	2	5	2	4	16 0.4%
Muhlenberg	6	7	6	4	6	29 0.8%
Nelson	9	12	7	10	8	46 1.3%
Nicholas	4	1	1	2	1	9 0.2%
Ohio	5	5	4	13	5	32 0.9%
Oldham	7	6	9	5	5	32 0.9%
Owen	4	1	6	4	4	19 0.5%
Owsley	0	3	0	2	1	6 0.2%



<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total 2009 - 2013</b>	
						<b>N</b>	<b>%</b>
<b>Pendleton</b>	10	2	2	2	1	<b>17</b>	<b>0.5%</b>
<b>Perry</b>	9	7	7	14	11	<b>48</b>	<b>1.3%</b>
<b>Pike</b>	17	21	19	21	20	<b>98</b>	<b>2.7%</b>
<b>Powell</b>	3	2	3	7	3	<b>18</b>	<b>0.5%</b>
<b>Pulaski</b>	13	9	13	8	7	<b>50</b>	<b>1.4%</b>
<b>Robertson</b>	0	0	0	1	0	<b>1</b>	<b>0.0%</b>
<b>Rockcastle</b>	5	1	8	13	4	<b>31</b>	<b>0.8%</b>
<b>Rowan</b>	8	7	7	5	5	<b>32</b>	<b>0.9%</b>
<b>Russell</b>	6	3	3	4	3	<b>19</b>	<b>0.5%</b>
<b>Scott</b>	5	8	6	5	12	<b>36</b>	<b>1.0%</b>
<b>Shelby</b>	9	11	9	6	6	<b>41</b>	<b>1.1%</b>
<b>Simpson</b>	3	5	5	3	2	<b>18</b>	<b>0.5%</b>
<b>Spencer</b>	5	3	7	5	0	<b>20</b>	<b>0.5%</b>
<b>Taylor</b>	1	1	9	7	1	<b>19</b>	<b>0.5%</b>
<b>Todd</b>	6	4	5	3	1	<b>19</b>	<b>0.5%</b>
<b>Trigg</b>	6	4	2	10	4	<b>26</b>	<b>0.7%</b>
<b>Trimble</b>	2	1	2	5	1	<b>11</b>	<b>0.3%</b>
<b>Union</b>	3	3	4	1	0	<b>11</b>	<b>0.3%</b>
<b>Warren</b>	25	11	18	14	18	<b>86</b>	<b>2.4%</b>
<b>Washington</b>	9	2	3	5	0	<b>19</b>	<b>0.5%</b>
<b>Wayne</b>	3	2	7	6	2	<b>20</b>	<b>0.5%</b>
<b>Webster</b>	3	2	2	2	3	<b>12</b>	<b>0.3%</b>
<b>Whitley</b>	10	9	6	11	7	<b>43</b>	<b>1.2%</b>
<b>Wolfe</b>	6	3	2	3	2	<b>16</b>	<b>0.4%</b>
<b>Woodford</b>	8	12	6	3	5	<b>34</b>	<b>0.9%</b>
<b>Total</b>	<b>791</b>	<b>760</b>	<b>720</b>	<b>746</b>	<b>638</b>	<b>3,655</b>	<b>100.0%</b>



**Table 31. Fatality Rates by County**

<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Adair</b>	42.71	10.74	32.11	21.42	16.02
<b>Allen</b>	15.14	10.01	14.90	24.74	29.54
<b>Anderson</b>	14.07	9.32	18.48	9.20	0.00
<b>Ballard</b>	36.57	0.00	24.23	12.00	48.01
<b>Barren</b>	40.31	35.58	35.49	21.11	25.57
<b>Bath</b>	43.31	51.69	34.07	25.42	25.08
<b>Bell</b>	24.42	24.39	6.96	14.19	25.10
<b>Boone</b>	12.77	9.22	8.21	14.60	7.23
<b>Bourbon</b>	44.94	10.02	15.00	5.01	10.00
<b>Boyd</b>	4.05	20.17	12.13	12.20	8.18
<b>Boyle</b>	3.53	24.56	28.02	6.98	6.89
<b>Bracken</b>	0.00	0.00	23.49	35.32	11.88
<b>Breathitt</b>	21.41	57.66	28.90	36.67	36.91
<b>Breckinridge</b>	25.03	44.87	14.81	14.95	34.93
<b>Bullitt</b>	16.27	16.11	7.99	9.22	9.11
<b>Butler</b>	7.89	15.73	85.76	15.58	23.45
<b>Caldwell</b>	7.69	15.41	23.12	15.46	23.40
<b>Calloway</b>	32.53	21.46	21.31	21.25	23.90
<b>Campbell</b>	3.35	8.84	7.70	13.20	5.50
<b>Carlisle</b>	0.00	58.80	59.43	39.73	39.99
<b>Carroll</b>	64.50	9.26	18.16	55.05	27.39
<b>Carter</b>	21.59	32.52	21.75	36.57	14.70
<b>Casey</b>	31.36	18.78	18.86	24.87	37.34
<b>Christian</b>	14.97	22.92	14.95	11.93	13.48
<b>Clark</b>	16.85	14.03	16.88	16.77	11.23
<b>Clay</b>	41.00	50.70	55.25	46.39	28.08
<b>Clinton</b>	29.33	48.72	39.21	29.17	9.86
<b>Crittenden</b>	10.75	53.69	21.42	21.55	21.61
<b>Cumberland</b>	14.59	58.39	43.91	0.00	14.73
<b>Daviess</b>	11.43	13.44	7.20	8.18	8.15
<b>Edmonson</b>	24.75	16.43	33.09	33.14	8.29
<b>Elliott</b>	64.71	25.33	12.98	12.85	0.00
<b>Estill</b>	0.00	47.69	20.46	0.00	55.22
<b>Fayette</b>	7.86	8.09	10.61	8.18	5.84
<b>Fleming</b>	28.01	27.81	20.67	6.87	41.36
<b>Floyd</b>	30.27	15.21	30.61	33.38	28.40
<b>Franklin</b>	8.12	24.35	16.20	10.04	6.04
<b>Fulton</b>	14.72	29.32	14.80	45.98	15.66
<b>Gallatin</b>	70.32	58.16	23.22	35.38	47.20
<b>Garrard</b>	17.75	11.82	17.77	29.56	11.82



<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Grant</b>	24.29	32.43	20.15	28.59	8.08
<b>Graves</b>	18.95	16.13	23.99	15.98	21.36
<b>Grayson</b>	31.23	15.51	11.56	46.22	23.08
<b>Green</b>	44.02	26.72	8.91	8.84	62.61
<b>Greenup</b>	13.49	13.56	21.70	16.35	8.21
<b>Hancock</b>	46.74	11.67	35.00	11.52	0.00
<b>Hardin</b>	18.76	16.83	12.10	16.82	18.49
<b>Harlan</b>	47.40	20.53	34.41	10.51	14.04
<b>Harrison</b>	21.17	26.56	21.30	48.32	27.00
<b>Hart</b>	32.97	65.91	38.39	32.67	10.77
<b>Henderson</b>	23.89	19.44	12.93	8.60	8.63
<b>Henry</b>	12.88	19.49	12.95	0.00	12.95
<b>Hickman</b>	0.00	20.47	125.42	21.03	21.07
<b>Hopkins</b>	21.31	14.93	12.79	19.26	10.72
<b>Jackson</b>	14.86	29.62	22.32	15.00	22.34
<b>Jefferson</b>	7.74	9.84	8.17	8.66	11.63
<b>Jessamine</b>	16.61	8.21	6.12	6.04	11.96
<b>Johnson</b>	12.92	12.81	12.82	17.11	12.79
<b>Kenton</b>	7.54	5.63	7.48	4.95	3.06
<b>Knott</b>	42.31	36.81	49.11	43.41	31.30
<b>Knox</b>	34.46	28.22	21.95	47.27	22.02
<b>Larue</b>	21.17	14.10	6.99	42.40	7.11
<b>Laurel</b>	23.93	32.23	13.48	28.59	21.83
<b>Lawrence</b>	25.17	31.51	6.24	25.24	37.84
<b>Lee</b>	25.36	50.80	12.79	25.95	13.77
<b>Leslie</b>	17.60	17.70	17.80	8.95	18.15
<b>Letcher</b>	24.63	32.59	28.63	8.35	16.94
<b>Lewis</b>	28.75	7.22	21.62	28.91	28.97
<b>Lincoln</b>	48.43	48.50	16.17	12.26	8.21
<b>Livingston</b>	52.76	20.98	0.00	10.61	21.37
<b>Logan</b>	37.21	14.91	18.66	30.02	37.21
<b>Lyon</b>	12.00	24.08	24.05	35.92	35.50
<b>Madison</b>	14.58	24.05	17.82	15.33	14.02
<b>Magoffin</b>	15.00	15.01	22.70	30.67	30.89
<b>Marion</b>	20.23	25.21	45.04	39.82	24.94
<b>Marshall</b>	41.39	12.72	28.75	31.90	19.29
<b>Martin</b>	0.00	31.02	23.53	23.54	0.00
<b>Mason</b>	28.63	17.15	22.66	22.84	46.30
<b>Mccracken</b>	15.23	24.41	18.22	28.99	10.71
<b>Mccreary</b>	5.49	5.46	10.94	16.60	22.24
<b>McLean</b>	0.00	21.01	10.50	10.52	10.53



County	2009	2010	2011	2012	2013
Meade	42.25	27.91	13.53	17.10	20.54
Menifee	0.00	31.71	47.49	0.00	0.00
Mercer	23.49	14.04	23.49	18.81	4.68
Metcalfe	49.67	29.68	29.78	20.06	40.07
Monroe	9.12	9.11	18.29	46.21	0.00
Montgomery	49.23	15.09	11.22	14.87	7.34
Morgan	21.54	14.36	35.86	14.63	29.90
Muhlenberg	19.04	22.23	19.19	12.83	19.24
Nelson	20.94	27.52	15.92	22.56	17.96
Nicholas	56.14	14.02	14.14	28.57	14.21
Ohio	20.93	20.99	16.60	54.00	20.84
Oldham	11.71	9.93	14.84	8.14	8.02
Owen	36.67	9.23	55.26	37.16	37.52
Owsley	0.00	62.97	0.00	42.35	21.49
Pendleton	67.63	13.41	13.61	13.69	6.86
Perry	31.34	24.37	24.35	49.57	39.27
Pike	26.05	32.33	29.27	32.72	31.56
Powell	23.73	15.84	23.71	56.08	24.01
Pulaski	20.73	14.26	20.42	12.58	10.95
Robertson	0.00	0.00	0.00	45.70	0.00
Rockcastle	29.28	5.87	46.87	76.44	23.96
Rowan	34.28	30.02	29.68	21.32	21.25
Russell	34.03	17.11	17.04	22.86	16.90
Scott	10.79	16.86	12.46	10.19	24.03
Shelby	21.65	26.03	20.90	13.76	13.57
Simpson	17.41	28.81	28.77	17.11	11.24
Spencer	29.46	17.54	40.28	28.71	0.00
Taylor	4.10	4.07	36.39	28.35	4.06
Todd	48.06	32.14	40.12	23.71	8.00
Trigg	42.19	27.87	13.98	69.22	27.99
Trimble	22.59	11.37	22.92	56.90	11.34
Union	19.99	19.99	26.55	6.73	0.00
Warren	22.25	9.63	15.58	11.95	15.21
Washington	77.92	16.99	25.33	42.25	0.00
Wayne	14.43	9.61	33.38	28.81	9.67
Webster	21.93	14.70	14.63	14.72	22.30
Whitley	27.78	25.29	16.75	30.99	19.57
Wolfe	81.62	40.82	27.24	41.88	27.59
Woodford	32.39	47.95	24.05	11.96	19.78
County Average	18.32	17.49	16.48	17.03	14.52



**Table 32. Fatalities by Age Group and Sex: Totals 2009-2013**

Age Group	Fatalities by Age					Fatalities by Age and Sex					
	Kentucky			Region	U.S.	Kentucky				Region %	U.S. %
	(N=3,655)	%	Pop. Rate*	(N=18,715)	(N=165,862)	Females		Males		Males	Males
			Per 100k			N	%	N	%		
<5	50	1.4%	3.56	1.2%	1.2%	24	48.0%	26	52.0%	51.6%	54.2%
5-9	34	0.9%	2.42	1.0%	1.1%	13	38.2%	21	61.8%	57.5%	55.3%
10-15	71	1.9%	4.16	1.7%	2.0%	31	43.7%	40	56.3%	56.3%	58.3%
16-20	328	9.0%	21.98	10.2%	10.3%	118	36.0%	210	64.0%	68.1%	67.8%
21-24	321	8.8%	27.79	9.7%	10.1%	91	28.3%	230	71.7%	74.0%	75.1%
25-34	670	18.3%	23.77	17.5%	17.1%	224	33.4%	446	66.6%	73.3%	74.9%
35-44	557	15.2%	19.05	14.0%	13.7%	164	29.4%	393	70.6%	73.7%	73.5%
45-54	562	15.4%	17.61	16.1%	15.5%	166	29.5%	396	70.5%	75.1%	73.7%
55-64	438	12.0%	16.64	12.0%	12.3%	137	31.3%	301	68.7%	72.0%	72.8%
65-74	318	8.7%	19.96	8.1%	7.7%	119	37.4%	199	62.6%	65.7%	65.3%
75+	305	8.3%	24.22	8.3%	8.9%	120	39.3%	185	60.7%	58.9%	56.9%
Unknown	1	0.0%	N/A	0.1%	0.2%	0	0.0%	1	100.0%	72.0%	68.3%
<b>Total</b>	<b>3,655</b>	<b>100.0%</b>	<b>16.94</b>	<b>100.0%</b>	<b>100.0%</b>	<b>1,207</b>	<b>33.0%</b>	<b>2,448</b>	<b>67.0%</b>	<b>70.5%</b>	<b>70.4%</b>

Highlighting is to help reader identify cells with higher numbers/percentages/population rates

\*Fatality rate based on intercensal estimates (2009-2011) and vintage data (2012 and 2013)

**Table 33. Fatalities by Race and Hispanic Origin**

Race	Kentucky				
	2009	2010	2011	2012	2013
White	729	656	609	647	N/A
Black	33	39	36	36	N/A
American Indian	0	0	0	1	N/A
Asian	1	1	3	0	N/A
Pacific Islander	0	0	1	0	N/A
All Other Races	2	4	2	3	N/A
Mixed Race	0	0	0	0	N/A
Unknown	26	60	69	59	N/A
Hispanic**	21	10	11	11	N/A
<b>Total</b>	<b>791</b>	<b>760</b>	<b>720</b>	<b>746</b>	<b>N/A</b>

\*\*Hispanic is an ethnic, not racial, designation. Because a Hispanic fatality may be of any race, or may not have had their race recorded, Hispanic fatalities do not contribute to the "Total" calculation.

[At the time this report was produced, 2013 race and Hispanic origin data were not available.]



**Table 34. Fatalities by Road Type**

	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=791)	(N=760)	(N=720)	(N=746)	(N=638)	(N=3,655)	(N=18,715)	(N=165,862)
Road Type								
Interstate/Expressway	89	92	64	75	74	10.78%	12.32%	16.01%
Arterial	285	303	274	270	210	36.72%	42.52%	43.96%
Collector	275	231	257	266	241	34.75%	24.87%	19.30%
Local	141	133	125	135	113	17.70%	18.43%	19.90%
Unknown	1	1	0	0	0	0.05%	1.85%	0.82%
<b>Total</b>	<b>791</b>	<b>760</b>	<b>720</b>	<b>746</b>	<b>638</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Highlighting is to help the reader identify cells with higher numbers/percentages.



## **II. ALCOHOL-IMPAIRED DRIVING FATALITIES AND ALCOHOL- IMPAIRMENT-RELATED FATAL CRASHES AND FATALITIES**



## ALCOHOL-IMPAIRED DRIVING FATALITIES AND ALCOHOL-IMPAIRMENT-RELATED FATAL CRASHES AND FATALITIES – KEY FINDINGS

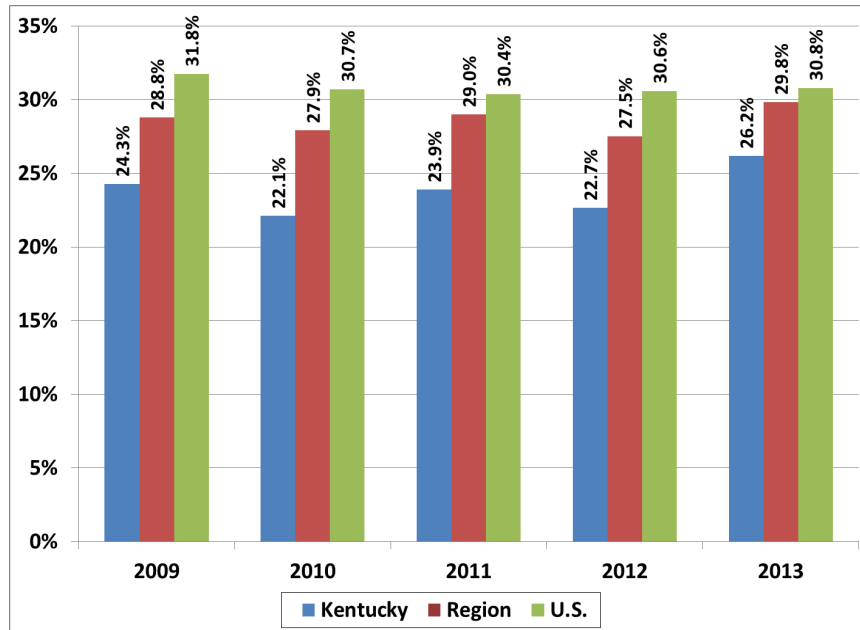
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In the period 2009-2013:

- In Kentucky, the percentage of traffic fatalities that involved alcohol-impaired driving remained below the percentages for Region 3 and the Nation throughout the five-year period (2009-2012). In 2013, alcohol-impaired driving fatalities accounted for 26.2% of all fatalities in Kentucky, representing a 12.7% increase in this proportion when compared to the prior four years (Table 4 and Figure 19).
- The counties with the most alcohol-impaired driving fatalities throughout the 2009-2013 period were: Jefferson (103); Fayette (34); Warren (25); Nelson (20); and Pike (20). Four of these counties experienced increases in such deaths in 2013 (when compared to the 2009-2012 average): Pike (+115.4%); Warren (+55.6%); Jefferson (+35.1%); Nelson (+33.3%). In contrast, Fayette (-14.3%) saw a decrease in this index during the same time period (Table 35).
- Throughout the five years, the counties with the highest percentage of fatalities involving alcohol-impaired driving were: Clinton (43.8%); Nelson (43.5%); Carlisle (40.0%); Martin (40.0%); and McLean (40.0%) (Table 35).
- In 2013, the counties with the highest alcohol-impaired population-based fatality rates (per 100,000 population) were: Lewis (21.73); Owsley (21.49); Carlisle (20.00); Green (17.89); and Powell (16.01) (Table 36).
- In Kentucky, 60.5% of alcohol-impairment-related fatal crashes occurred between 6 p.m. and 3 a.m.; 57.3% occurred on Fridays, Saturdays, and Sundays. In the Region 3 and the U.S. as a whole, the majority of such crashes also occurred between 6 p.m. and 3 a.m. (66.2% Regionally and 65.1% Nationally) and on Fridays, Saturdays, and Sundays (59.9% Regionally and 60.6% Nationally) (Table 37).
- For the years 2009 through 2013, 26% of Kentucky's fatalities were associated with a blood alcohol concentration of at least 0.08; this is lower than the percentages for Region 3 (33%) and for the U.S. as a whole (35%) during the same years (Table 38).
- NHTSA's alcohol imputation data estimate BACs where no test results are available. These data show that during the 2009-2013 period, 16.0% of *drivers* and *operators* involved in fatal crashes in Kentucky had a BAC of at least 0.08. This percentage is lower than that seen for Region 3 (19.7%) and for the Nation (21.5%) (Table 39).
- In Kentucky, the proportion of drivers/operators involved in fatal crashes that had a BAC of 0.08 or above remained below the percentage of the Region throughout the five-year of the period (2009-2013), but above that of the Nation for three years (2010, 2011, and 2013) (Figure 20).
- Throughout the 2009-2013 period in Kentucky, collector roads were associated with the largest proportion of alcohol-impaired driving fatalities (39.6%), followed by local roads (26.4%), and then arterial roads (26.2%). During these years, arterial roads accounted for the greatest proportion of such fatalities across Region 3 (36.4%) and throughout the Nation (37.7%). The smallest proportion of alcohol-impaired driving fatalities occurred on



interstates/expressways in Kentucky (7.7%), Region 3 (10.4%), and the Nation (14.9%) (Table 40).



**Figure 19. Alcohol-Impaired Driving Fatalities as Percent of Total Fatalities**



**Table 35. Alcohol-Impaired Driving Fatalities by County**

<b>Alcohol-Impaired Driving (A-I) Fatalities*</b>						<b>Total A-I Fatalities</b>	<b>Total Fatalities</b>	<b>% A-I</b>	<b>% Change: 2013 vs. prior 4-yr Avg.</b>
<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>				
<b>Adair</b>	0	0	1	2	0	<b>3</b>	<b>23</b>	<b>13.0%</b>	-100.0%
<b>Allen</b>	0	0	0	0	2	<b>2</b>	<b>19</b>	<b>10.5%</b>	N/A
<b>Anderson</b>	0	0	1	0	0	<b>1</b>	<b>11</b>	<b>9.1%</b>	-100.0%
<b>Ballard</b>	1	0	1	0	0	<b>2</b>	<b>10</b>	<b>20.0%</b>	-100.0%
<b>Barren</b>	5	2	3	4	4	<b>18</b>	<b>67</b>	<b>26.9%</b>	14.3%
<b>Bath</b>	1	0	1	0	0	<b>2</b>	<b>21</b>	<b>9.5%</b>	-100.0%
<b>Bell</b>	1	0	0	1	2	<b>4</b>	<b>27</b>	<b>14.8%</b>	300.0%
<b>Boone</b>	3	6	3	4	2	<b>18</b>	<b>63</b>	<b>28.6%</b>	-50.0%
<b>Bourbon</b>	2	1	2	0	0	<b>5</b>	<b>17</b>	<b>29.4%</b>	-100.0%
<b>Boyd</b>	0	3	0	3	1	<b>7</b>	<b>28</b>	<b>25.0%</b>	-33.3%
<b>Boyle</b>	1	1	0	0	0	<b>2</b>	<b>20</b>	<b>10.0%</b>	-100.0%
<b>Bracken</b>	0	0	0	1	0	<b>1</b>	<b>6</b>	<b>16.7%</b>	-100.0%
<b>Breathitt</b>	2	4	0	1	0	<b>7</b>	<b>25</b>	<b>28.0%</b>	-100.0%
<b>Breckinridge</b>	3	0	0	2	0	<b>5</b>	<b>27</b>	<b>18.5%</b>	-100.0%
<b>Bullitt</b>	2	2	1	1	2	<b>8</b>	<b>44</b>	<b>18.2%</b>	33.3%
<b>Butler</b>	0	0	4	0	0	<b>4</b>	<b>19</b>	<b>21.1%</b>	-100.0%
<b>Caldwell</b>	0	1	1	1	1	<b>4</b>	<b>11</b>	<b>36.4%</b>	33.3%
<b>Calloway</b>	4	3	2	1	0	<b>10</b>	<b>45</b>	<b>22.2%</b>	-100.0%
<b>Campbell</b>	0	3	4	2	1	<b>10</b>	<b>35</b>	<b>28.6%</b>	-55.6%
<b>Carlisle</b>	0	2	1	0	1	<b>4</b>	<b>10</b>	<b>40.0%</b>	33.3%
<b>Carroll</b>	4	0	0	1	1	<b>6</b>	<b>19</b>	<b>31.6%</b>	-20.0%
<b>Carter</b>	1	1	5	4	1	<b>12</b>	<b>35</b>	<b>34.3%</b>	-63.6%
<b>Casey</b>	0	1	1	1	2	<b>5</b>	<b>21</b>	<b>23.8%</b>	166.7%
<b>Christian</b>	2	4	1	2	1	<b>10</b>	<b>58</b>	<b>17.2%</b>	-55.6%
<b>Clark</b>	0	3	0	1	0	<b>4</b>	<b>27</b>	<b>14.8%</b>	-100.0%
<b>Clay</b>	2	3	4	2	2	<b>13</b>	<b>48</b>	<b>27.1%</b>	-27.3%
<b>Clinton</b>	0	5	0	1	1	<b>7</b>	<b>16</b>	<b>43.8%</b>	-33.3%
<b>Crittenden</b>	0	1	1	1	0	<b>3</b>	<b>12</b>	<b>25.0%</b>	-100.0%
<b>Cumberland</b>	0	0	0	0	1	<b>1</b>	<b>9</b>	<b>11.1%</b>	N/A
<b>Daviess</b>	5	0	2	4	0	<b>11</b>	<b>47</b>	<b>23.4%</b>	-100.0%
<b>Edmonson</b>	1	0	3	0	1	<b>5</b>	<b>14</b>	<b>35.7%</b>	0.0%
<b>Elliott</b>	1	0	0	0	0	<b>1</b>	<b>9</b>	<b>11.1%</b>	-100.0%
<b>Estill</b>	0	0	1	0	0	<b>1</b>	<b>18</b>	<b>5.6%</b>	-100.0%
<b>Fayette</b>	5	7	11	5	6	<b>34</b>	<b>122</b>	<b>27.9%</b>	-14.3%
<b>Fleming</b>	1	0	2	1	1	<b>5</b>	<b>18</b>	<b>27.8%</b>	0.0%
<b>Floyd</b>	3	0	4	2	5	<b>14</b>	<b>54</b>	<b>25.9%</b>	122.2%
<b>Franklin</b>	1	2	3	0	0	<b>6</b>	<b>32</b>	<b>18.8%</b>	-100.0%
<b>Fulton</b>	0	0	0	3	0	<b>3</b>	<b>8</b>	<b>37.5%</b>	-100.0%
<b>Gallatin</b>	1	1	1	1	0	<b>4</b>	<b>20</b>	<b>20.0%</b>	-100.0%
<b>Garrard</b>	2	0	0	1	0	<b>3</b>	<b>15</b>	<b>20.0%</b>	-100.0%



Alcohol-Impaired Driving (A-I) Fatalities*						Total A-I Fatalities	Total Fatalities	% A-I	% Change: 2013 vs. prior 4-yr Avg.
County	2009	2010	2011	2012	2013				
Grant	1	1	0	0	0	2	28	7.1%	-100.0%
Graves	2	2	0	0	2	6	36	16.7%	100.0%
Grayson	1	0	1	3	1	6	33	18.2%	-20.0%
Green	1	0	0	0	2	3	17	17.6%	700.0%
Greenup	2	0	0	1	0	3	27	11.1%	-100.0%
Hancock	1	0	0	1	0	2	9	22.2%	-100.0%
Hardin	3	4	0	2	5	14	88	15.9%	122.2%
Harlan	2	2	2	1	1	8	37	21.6%	-42.9%
Harrison	0	0	1	4	2	7	27	25.9%	60.0%
Hart	1	0	0	0	2	3	33	9.1%	700.0%
Henderson	5	3	3	1	1	13	34	38.2%	-66.7%
Henry	1	0	0	0	0	1	9	11.1%	-100.0%
Hickman	0	0	2	0	0	2	9	22.2%	-100.0%
Hopkins	5	1	1	0	3	10	37	27.0%	71.4%
Jackson	1	0	0	0	0	1	14	7.1%	-100.0%
Jefferson	21	23	13	20	26	103	344	29.9%	35.1%
Jessamine	4	1	0	1	2	8	24	33.3%	33.3%
Johnson	0	0	0	1	1	2	16	12.5%	300.0%
Kenton	3	2	3	1	1	10	46	21.7%	-55.6%
Knott	2	3	2	2	0	9	33	27.3%	-100.0%
Knox	1	2	1	0	1	5	49	10.2%	0.0%
Larue	0	0	1	1	1	3	13	23.1%	100.0%
Laurel	3	5	3	2	4	17	71	23.9%	23.1%
Lawrence	2	1	0	2	2	7	20	35.0%	60.0%
Lee	0	0	0	0	0	0	10	0.0%	N/A
Leslie	0	0	1	0	0	1	9	11.1%	-100.0%
Letcher	0	4	1	0	2	7	27	25.9%	60.0%
Lewis	0	1	0	1	3	5	16	31.3%	500.0%
Lincoln	6	1	3	1	1	12	33	36.4%	-63.6%
Livingston	0	0	0	1	1	2	10	20.0%	300.0%
Logan	2	1	2	1	1	7	37	18.9%	-33.3%
Lyon	0	0	0	1	1	2	11	18.2%	300.0%
Madison	3	4	5	0	2	14	72	19.4%	-33.3%
Magoffin	0	0	1	1	1	3	15	20.0%	100.0%
Marion	1	3	1	2	1	8	31	25.8%	-42.9%
Marshall	3	3	1	1	0	8	42	19.0%	-100.0%
Martin	0	1	2	1	0	4	10	40.0%	-100.0%
Mason	1	1	2	3	1	8	24	33.3%	-42.9%
McCracken	1	4	3	6	0	14	64	21.9%	-100.0%
McCreary	1	0	0	0	0	1	11	9.1%	-100.0%
McLean	0	1	1	0	0	2	5	40.0%	-100.0%



Alcohol-Impaired Driving (A-I) Fatalities*						Total A-I Fatalities	Total Fatalities	% A-I	% Change: 2013 vs. prior 4-yr Avg.
County	2009	2010	2011	2012	2013				
Meade	4	1	0	1	2	8	35	22.9%	33.3%
Menifee	0	0	0	0	0	0	5	0.0%	N/A
Mercer	1	0	1	1	0	3	18	16.7%	-100.0%
Metcalfe	1	0	1	1	0	3	17	17.6%	-100.0%
Monroe	0	0	1	2	0	3	9	33.3%	-100.0%
Montgomery	5	1	1	0	0	7	26	26.9%	-100.0%
Morgan	0	0	0	0	1	1	16	6.3%	N/A
Muhlenberg	1	1	0	0	2	4	29	13.8%	300.0%
Nelson	4	7	2	2	5	20	46	43.5%	33.3%
Nicholas	0	0	0	0	0	0	9	0.0%	N/A
Ohio	1	1	0	4	2	8	32	25.0%	33.3%
Oldham	1	1	1	1	4	8	32	25.0%	300.0%
Owen	0	0	2	4	1	7	19	36.8%	-33.3%
Owsley	0	1	0	0	1	2	6	33.3%	300.0%
Pendleton	2	0	0	2	0	4	17	23.5%	-100.0%
Perry	1	2	1	5	2	11	48	22.9%	-11.1%
Pike	2	3	4	4	7	20	98	20.4%	115.4%
Powell	0	0	0	1	2	3	18	16.7%	700.0%
Pulaski	2	1	4	1	3	11	50	22.0%	50.0%
Robertson	0	0	0	0	0	0	1	0.0%	N/A
Rockcastle	0	0	1	4	1	6	31	19.4%	-20.0%
Rowan	1	2	3	0	1	7	32	21.9%	-33.3%
Russell	1	2	1	0	0	4	19	21.1%	-100.0%
Scott	2	2	2	0	4	10	36	27.8%	166.7%
Shelby	1	1	0	0	2	4	41	9.8%	300.0%
Simpson	0	0	2	0	0	2	18	11.1%	-100.0%
Spencer	0	0	1	1	0	2	20	10.0%	-100.0%
Taylor	0	0	3	1	0	4	19	21.1%	-100.0%
Todd	1	1	0	0	0	2	19	10.5%	-100.0%
Trigg	1	0	0	5	1	7	26	26.9%	-33.3%
Trimble	1	0	1	0	0	2	11	18.2%	-100.0%
Union	0	2	1	0	0	3	11	27.3%	-100.0%
Warren	10	1	7	0	7	25	86	29.1%	55.6%
Washington	2	0	0	2	0	4	19	21.1%	-100.0%
Wayne	0	0	2	4	0	6	20	30.0%	-100.0%
Webster	1	0	1	0	1	3	12	25.0%	100.0%
Whitley	0	2	2	1	3	8	43	18.6%	140.0%
Wolfe	1	0	2	0	1	4	16	25.0%	33.3%
Woodford	3	2	0	0	2	7	34	20.6%	60.0%
Totals	184	164	167	162	164	841	3,655	23.0%	-3.1%



**Table 36. Alcohol-Impaired Driving Fatalities by County: Rate per 100,000 Population**

<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Adair	0.00	0.00	5.35	10.71	0.00
Allen	0.00	0.00	0.00	0.00	9.85
Anderson	0.00	0.00	4.62	0.00	0.00
Ballard	12.19	0.00	12.12	0.00	0.00
Barren	11.86	4.74	7.10	9.38	9.30
Bath	8.66	0.00	8.52	0.00	0.00
Bell	3.49	0.00	0.00	3.55	7.17
Boone	2.55	5.03	2.46	3.24	1.61
Bourbon	9.99	5.01	10.00	0.00	0.00
Boyd	0.00	6.05	0.00	6.10	2.05
Boyle	3.53	3.51	0.00	0.00	0.00
Bracken	0.00	0.00	0.00	11.77	0.00
Breathitt	14.28	28.83	0.00	7.33	0.00
Breckinridge	15.02	0.00	0.00	9.96	0.00
Bullitt	2.71	2.69	1.33	1.32	2.60
Butler	0.00	0.00	31.18	0.00	0.00
Caldwell	0.00	7.71	7.71	7.73	7.80
Calloway	10.84	8.05	5.33	2.66	0.00
Campbell	0.00	3.31	4.40	2.20	1.10
Carlisle	0.00	39.20	19.81	0.00	20.00
Carroll	36.86	0.00	0.00	9.17	9.13
Carter	3.60	3.61	18.13	14.63	3.68
Casey	0.00	6.26	6.29	6.22	12.45
Christian	2.72	5.39	1.36	2.65	1.35
Clark	0.00	8.42	0.00	2.79	0.00
Clay	9.11	13.83	18.42	9.28	9.36
Clinton	0.00	48.72	0.00	9.72	9.86
Crittenden	0.00	10.74	10.71	10.78	0.00
Cumberland	0.00	0.00	0.00	0.00	14.73
Daviess	5.19	0.00	2.06	4.09	0.00
Edmonson	8.25	0.00	24.81	0.00	8.29
Elliott	12.94	0.00	0.00	0.00	0.00
Estill	0.00	0.00	6.82	0.00	0.00
Fayette	1.71	2.36	3.65	1.64	1.95
Fleming	7.00	0.00	13.78	6.87	6.89
Floyd	7.57	0.00	10.20	5.13	12.91
Franklin	2.03	4.06	6.07	0.00	0.00
Fulton	0.00	0.00	0.00	45.98	0.00
Gallatin	11.72	11.63	11.61	11.79	0.00
Garrard	11.83	0.00	0.00	5.91	0.00
Grant	4.05	4.05	0.00	0.00	0.00
Graves	5.42	5.38	0.00	0.00	5.34
Grayson	3.90	0.00	3.85	11.55	3.85
Green	8.80	0.00	0.00	0.00	17.89
Greenup	5.40	0.00	0.00	2.72	0.00
Hancock	11.68	0.00	0.00	11.52	0.00
Hardin	2.96	3.74	0.00	1.87	4.62
Harlan	6.77	6.84	6.88	3.50	3.51
Harrison	0.00	0.00	5.33	21.48	10.80
Hart	5.50	0.00	0.00	0.00	10.77



County	2009	2010	2011	2012	2013
Henderson	10.86	6.48	6.46	2.15	2.16
Henry	6.44	0.00	0.00	0.00	0.00
Hickman	0.00	0.00	41.81	0.00	0.00
Hopkins	10.66	2.13	2.13	0.00	6.43
Jackson	7.43	0.00	0.00	0.00	0.00
Jefferson	2.85	3.10	1.74	2.66	3.44
Jessamine	8.31	2.05	0.00	2.01	3.99
Johnson	0.00	0.00	0.00	4.28	4.26
Kenton	1.88	1.25	1.87	0.62	0.61
Knott	12.09	18.41	12.28	12.40	0.00
Knox	3.13	6.27	3.14	0.00	3.15
Larue	0.00	0.00	6.99	7.07	7.11
Laurel	5.13	8.48	5.05	3.36	6.72
Lawrence	12.59	6.30	0.00	12.62	12.61
Lee	0.00	0.00	0.00	0.00	0.00
Leslie	0.00	0.00	8.90	0.00	0.00
Letcher	0.00	16.29	4.09	0.00	8.47
Lewis	0.00	7.22	0.00	7.23	21.73
Lincoln	24.22	4.04	12.13	4.09	4.10
Livingston	0.00	0.00	0.00	10.61	10.68
Logan	7.44	3.73	7.46	3.75	3.72
Lyon	0.00	0.00	0.00	11.97	11.83
Madison	3.65	4.81	5.94	0.00	2.34
Magoffin	0.00	0.00	7.57	7.67	7.72
Marion	5.06	15.13	5.00	9.96	4.99
Marshall	9.55	9.54	3.19	3.19	0.00
Martin	0.00	7.76	15.69	7.85	0.00
Mason	5.73	5.72	11.33	17.13	5.79
McCracken	1.52	6.10	4.55	9.15	0.00
McCreary	5.49	0.00	0.00	0.00	0.00
McLean	0.00	10.51	10.50	0.00	0.00
Meade	14.08	3.49	0.00	3.42	6.85
Menifee	0.00	0.00	0.00	0.00	0.00
Mercer	4.70	0.00	4.70	4.70	0.00
Metcalf	9.93	0.00	9.93	10.03	0.00
Monroe	0.00	0.00	9.14	18.48	0.00
Montgomery	18.93	3.77	3.74	0.00	0.00
Morgan	0.00	0.00	0.00	0.00	7.47
Muhlenberg	3.17	3.18	0.00	0.00	6.41
Nelson	9.31	16.05	4.55	4.51	11.23
Nicholas	0.00	0.00	0.00	0.00	0.00
Ohio	4.19	4.20	0.00	16.61	8.34
Oldham	1.67	1.65	1.65	1.63	6.41
Owen	0.00	0.00	18.42	37.16	9.38
Owsley	0.00	20.99	0.00	0.00	21.49
Pendleton	13.53	0.00	0.00	13.69	0.00
Perry	3.48	6.96	3.48	17.70	7.14
Pike	3.06	4.62	6.16	6.23	11.04
Powell	0.00	0.00	0.00	8.01	16.01
Pulaski	3.19	1.58	6.28	1.57	4.69



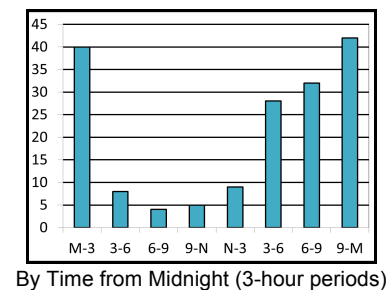
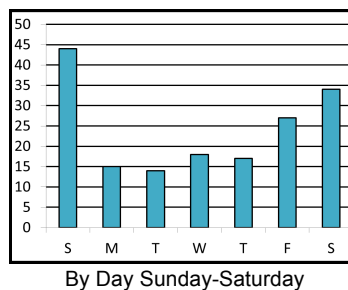
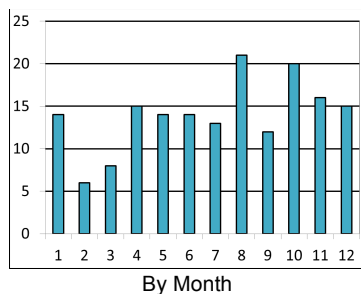
<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Robertson</b>	0.00	0.00	0.00	0.00	0.00
<b>Rockcastle</b>	0.00	0.00	5.86	23.52	5.99
<b>Rowan</b>	4.28	8.58	12.72	0.00	4.25
<b>Russell</b>	5.67	11.41	5.68	0.00	0.00
<b>Scott</b>	4.32	4.22	4.15	0.00	8.01
<b>Shelby</b>	2.41	2.37	0.00	0.00	4.52
<b>Simpson</b>	0.00	0.00	11.51	0.00	0.00
<b>Spencer</b>	0.00	0.00	5.75	5.74	0.00
<b>Taylor</b>	0.00	0.00	12.13	4.05	0.00
<b>Todd</b>	8.01	8.03	0.00	0.00	0.00
<b>Trigg</b>	7.03	0.00	0.00	34.61	7.00
<b>Trimble</b>	11.29	0.00	11.46	0.00	0.00
<b>Union</b>	0.00	13.33	6.64	0.00	0.00
<b>Warren</b>	8.90	0.88	6.06	0.00	5.91
<b>Washington</b>	17.32	0.00	0.00	16.90	0.00
<b>Wayne</b>	0.00	0.00	9.54	19.21	0.00
<b>Webster</b>	7.31	0.00	7.32	0.00	7.43
<b>Whitley</b>	0.00	5.62	5.58	2.82	8.39
<b>Wolfe</b>	13.60	0.00	27.24	0.00	13.80
<b>Woodford</b>	12.14	7.99	0.00	0.00	7.91
<b>County Average</b>	<b>4.26</b>	<b>3.77</b>	<b>3.82</b>	<b>3.70</b>	<b>3.73</b>



**Table 37. Alcohol-Impairment-Related\* Fatal Crashes by Month, Day of Week, and Time of Day:  
Totals 2009-2013**

	Kentucky (N=864)		Region (N=5,606)	U.S. (N=53,776)
	N	%	%	%
<b>MONTH</b>				
January	54	6.3%	7.5%	7.4%
February	60	6.9%	6.3%	6.7%
March	55	6.4%	7.3%	7.8%
April	76	8.8%	8.3%	8.1%
May	75	8.7%	8.9%	8.9%
June	95	11.0%	9.4%	8.6%
July	81	9.4%	9.5%	9.3%
August	76	8.8%	9.3%	9.3%
September	80	9.3%	8.7%	8.7%
October	68	7.9%	8.9%	9.1%
November	83	9.6%	8.2%	8.3%
December	61	7.1%	7.6%	7.9%
<b>DAY OF WEEK</b>				
Sunday	165	19.1%	19.6%	21.3%
Monday	79	9.2%	9.7%	9.8%
Tuesday	97	11.2%	9.7%	9.0%
Wednesday	90	10.4%	9.2%	9.6%
Thursday	102	11.8%	11.5%	11.0%
Friday	140	16.2%	16.3%	15.3%
Saturday	190	22.0%	24.0%	24.0%
<b>TIME OF DAY</b>				
Midnight-3am	154	17.8%	24.2%	25.0%
3am-6am	108	12.5%	12.6%	13.0%
6am-9am	47	5.4%	4.3%	4.4%
9am-Noon	31	3.6%	2.6%	2.5%
Noon-3pm	60	6.9%	4.8%	4.3%
3pm-6pm	95	11.0%	9.5%	9.5%
6pm-9pm	179	20.7%	19.3%	18.0%
9pm-Midnight	190	22.0%	22.7%	22.1%
Unknown	0	0.0%	0.1%	1.1%

\*Based on fatal crashes in which any crash participant had a BAC of 0.08 or above. Total fatal crashes may differ slightly depending on grouping (month, day, time) due to imputation method.





**Table 38. Fatalities by the Highest BAC in the Crash\***

	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=791)	(N=760)	(N=720)	(N=746)	(N=638)	(N=3,655)	(N=18,715)	(N=165,862)
BAC								
0.00	68%	70%	71%	72%	67%	70%	62%	59%
0.01 - 0.07	6%	6%	4%	3%	4%	5%	6%	6%
0.08+	26%	24%	25%	25%	29%	26%	33%	35%

\*Data based on all crash participants.

Based on NHTSA's alcohol imputation data. Rounding may cause the sum of sub-categories to differ slightly from total values

**Table 39. BACs of Drivers/Operators Involved in Fatal Crashes**

	2009	2010	2011	2012	2013	Total 2009 - 2013
<b>KY</b>	<b>(N=1,110)</b>	<b>(N=1,037)</b>	<b>(N=998)</b>	<b>(N=1,023)</b>	<b>(N=873)</b>	<b>(N=5,041)</b>
BAC						
0.00	80.1%	81.6%	82.2%	82.5%	78.7%	81.1%
0.01-0.07	3.6%	3.5%	2.7%	2.2%	2.9%	3.0%
0.08+	16.3%	14.9%	15.1%	15.3%	18.4%	16.0%
<b>Region</b>	<b>(N=5,266)</b>	<b>(N=5,064)</b>	<b>(N=5,003)</b>	<b>(N=5,111)</b>	<b>(N=4,871)</b>	<b>(N=25,315)</b>
BAC						
0.00	76.2%	76.2%	76.4%	77.4%	75.7%	76.4%
0.01-0.07	3.8%	4.3%	3.9%	3.5%	3.9%	3.9%
0.08+	20.0%	19.4%	19.7%	19.1%	20.3%	19.7%
<b>U.S.</b>	<b>(N=45,337)</b>	<b>(N=44,599)</b>	<b>(N=43,840)</b>	<b>(N=45,664)</b>	<b>(N=44,574)</b>	<b>(N=224,014)</b>
BAC						
0.00	73.5%	74.4%	75.1%	74.9%	74.6%	74.5%
0.01-0.07	4.4%	4.1%	3.8%	3.9%	4.1%	4.1%
0.08+	22.1%	21.5%	21.2%	21.2%	21.2%	21.5%

\*Based on NHTSA's alcohol imputation data. Rounding may cause the sum of sub-categories to differ slightly from total values



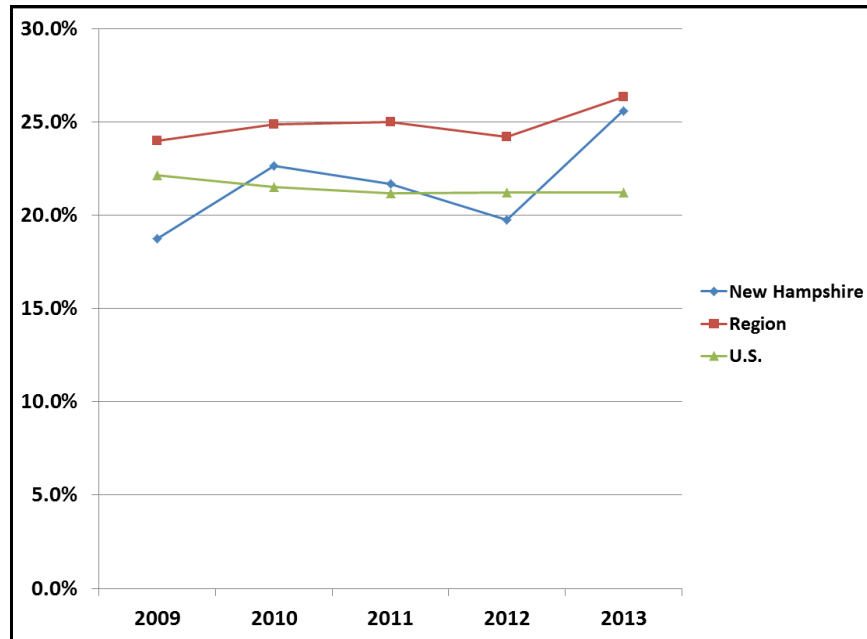


Figure 20. Percent of Drivers/Operators with BAC ≥ 0.08

Table 40. Alcohol-Impaired Driving Fatalities by Road Type

Road Type	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=192)	(N=168)	(N=171)	(N=170)	(N=167)	(N=868)	(N=5,355)	(N=51,174)
Interstate/Expressway	16	12	13	14	12	7.72%	10.42%	14.91%
Arterial	52	53	46	42	34	26.15%	36.43%	37.66%
Collector	74	61	63	71	75	39.63%	27.66%	22.06%
Local	50	41	49	43	46	26.38%	23.49%	24.40%
Unknown	0	1	0	0	0	0.12%	2.00%	0.97%
<b>Total</b>	<b>192</b>	<b>168</b>	<b>171</b>	<b>170</b>	<b>167</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Highlighting is to help the reader identify cells with higher numbers/percentages.



## **II. SPEEDING-RELATED CRASHES**



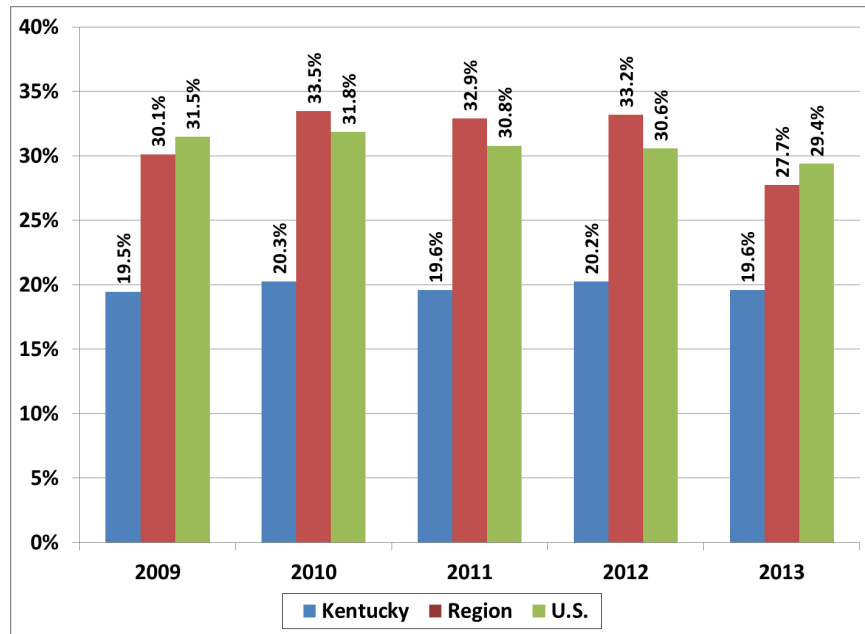
## **SPEEDING-RELATED CRASHES – KEY FINDINGS**

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In the period 2009-2013:

- The percentage of speeding-related fatalities in Kentucky remained below the proportions for Region 3 and the U.S. as a whole during the five-year period (2009-2013). In 2013, 19.6% of Kentucky's traffic fatalities were recorded as speeding-related, compared to 27.7% for Region 3, and 29.4% Nationwide (Figure 21).
- The counties that accounted for the highest percentages of speeding-related fatalities in Kentucky during the 2009-2013 period were: Jefferson (13.2%); Fayette (4.7%); Boone (3.0%); Pike (2.8%); Hardin (2.6%); and Laurel (2.6%) (Table 41).
- Kentucky's speeding-related population-based fatality rate decreased by 17.5% in 2013 (2.84 fatalities per 100,000 population) compared to the average of the previous four years (3.45). The counties with the highest speeding-related population-based fatality rates during the 2009-2013 period were: Carlisle (15.81); Clay (12.93); Hickman (12.44); Cumberland (11.71); and Nicholas (11.31) (Table 8 and Table 42).
- The highest concentration of Kentucky's 2009-2013 speeding-related fatalities occurred on roads with a speed limit of 55 mph (57.0%), as was the case in Region 3 (41.2%) and the U.S. as a whole (26.7%) (Table 43).
- From 2009 through 2013, the plurality speeding-related fatalities in Kentucky occurred on the State's collector roads (36.8%), but on arterial roads across the Region and throughout the U.S. as a whole (36.7% each). In the State, the Region, and the Nation, the smallest portion of speeding-related fatalities occurred on interstates/expressways (9.5%, 13.0%, and 16.4%, respectively) (Table 44).
- Throughout the five years in Kentucky, the majority of speeding-related fatal crashes occurred on Fridays, Saturdays, and Sundays (51.4%), as it did across Region 3 (52.3%) and throughout the Nation (54.3%). The highest proportion speeding-related fatal crashes occurred between the hours of 3 p.m. and 6 p.m. in the State (18.7%), but between the hours of midnight and 3 a.m. Regionally (17.5%) and Nationwide (17.9%) (Table 45).
- In Kentucky, from 2009 through 2013, 11.4% of drivers involved in fatal crashes (any type of fatal crash) had previous speeding convictions, a percentage lower than those seen for Region 3 (16.4%) and the U.S. as a whole (17.2%) during the same years (Table 46).
- In Kentucky, those ages 25-34 constituted a plurality of drivers involved in a fatal crash (any type) with a previous speeding conviction (24.4%), as they did across Region 3 (26.1%) and throughout the U.S. as a whole (26.2%). Males accounted for 80.1% of the State's drivers involved in fatal crashes with previous speeding convictions, 76.7% of the Region's, and 78.5% of the Nation's (Table 47).





**Figure 21. Speeding-Related Fatalities As Percent of Total Fatalities**



**Table 41. Speeding-Related Fatalities by County**

<b>Speed-Related Fatalities</b>						<b>Total 2009 - 2013</b>		<b>% Change: 2013 vs. prior 4-yr Avg.</b>
<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>N</b>	<b>%</b>	
Adair	0	0	0	2	1	3	0.4%	100.0%
Allen	0	1	0	1	1	3	0.4%	100.0%
Anderson	0	0	2	0	0	2	0.3%	-100.0%
Ballard	0	0	0	0	0	0	0.0%	N/A
Barren	2	4	2	1	6	15	2.1%	166.7%
Bath	0	2	2	2	0	6	0.8%	-100.0%
Bell	0	0	0	0	1	1	0.1%	N/A
Boone	8	5	3	2	4	22	3.0%	-11.1%
Bourbon	2	1	1	0	1	5	0.7%	0.0%
Boyd	0	0	3	0	0	3	0.4%	-100.0%
Boyle	1	0	0	1	0	2	0.3%	-100.0%
Bracken	0	0	0	0	0	0	0.0%	N/A
Breathitt	0	0	1	0	0	1	0.1%	-100.0%
Breckinridge	2	0	0	1	0	3	0.4%	-100.0%
Bullitt	0	2	0	1	0	3	0.4%	-100.0%
Butler	0	1	6	0	0	7	1.0%	-100.0%
Caldwell	0	0	1	1	0	2	0.3%	-100.0%
Calloway	2	0	3	1	5	11	1.5%	233.3%
Campbell	0	3	3	3	1	10	1.4%	-55.6%
Carlisle	0	1	1	1	1	4	0.6%	33.3%
Carroll	1	0	0	1	0	2	0.3%	-100.0%
Carter	0	1	3	3	0	7	1.0%	-100.0%
Casey	0	1	0	1	1	3	0.4%	100.0%
Christian	2	3	3	1	6	15	2.1%	166.7%
Clark	0	0	1	3	0	4	0.6%	-100.0%
Clay	1	2	5	5	1	14	1.9%	-69.2%
Clinton	0	1	0	0	1	2	0.3%	300.0%
Crittenden	0	2	1	0	0	3	0.4%	-100.0%
Cumberland	0	2	2	0	0	4	0.6%	-100.0%
Daviess	3	3	0	2	0	8	1.1%	-100.0%
Edmonson	1	1	0	0	0	2	0.3%	-100.0%
Elliott	0	0	0	0	0	0	0.0%	N/A
Estill	0	1	0	0	0	1	0.1%	-100.0%
Fayette	8	3	9	11	3	34	4.7%	-61.3%
Fleming	0	0	1	0	0	1	0.1%	-100.0%
Floyd	2	0	2	3	3	10	1.4%	71.4%
Franklin	1	2	5	2	1	11	1.5%	-60.0%
Fulton	0	0	0	3	0	3	0.4%	-100.0%
Gallatin	1	2	0	0	0	3	0.4%	-100.0%
Garrard	3	0	0	0	0	3	0.4%	-100.0%



Speed-Related Fatalities						Total 2009 - 2013		% Change: 2013 vs. prior 4-yr Avg.
County	2009	2010	2011	2012	2013	N	%	
Grant	1	2	0	2	0	5	0.7%	-100.0%
Graves	3	1	2	1	2	9	1.2%	14.3%
Grayson	1	0	0	0	1	2	0.3%	300.0%
Green	0	0	0	0	1	1	0.1%	N/A
Greenup	1	2	2	0	0	5	0.7%	-100.0%
Hancock	0	0	0	1	0	1	0.1%	-100.0%
Hardin	4	7	2	3	3	19	2.6%	-25.0%
Harlan	0	3	0	1	0	4	0.6%	-100.0%
Harrison	3	3	0	1	1	8	1.1%	-42.9%
Hart	0	0	1	0	1	2	0.3%	300.0%
Henderson	3	2	0	0	1	6	0.8%	-20.0%
Henry	1	0	1	0	2	4	0.6%	300.0%
Hickman	0	0	3	0	0	3	0.4%	-100.0%
Hopkins	4	2	0	1	1	8	1.1%	-42.9%
Jackson	1	0	0	0	1	2	0.3%	300.0%
Jefferson	24	26	10	18	18	96	13.2%	-7.7%
Jessamine	4	1	0	1	1	7	1.0%	-33.3%
Johnson	0	0	0	1	1	2	0.3%	300.0%
Kenton	4	4	1	2	1	12	1.7%	-63.6%
Knott	1	0	0	0	0	1	0.1%	-100.0%
Knox	0	2	1	7	1	11	1.5%	-60.0%
Larue	0	0	0	3	1	4	0.6%	33.3%
Laurel	2	5	2	7	3	19	2.6%	-25.0%
Lawrence	0	1	0	1	1	3	0.4%	100.0%
Lee	0	4	0	0	0	4	0.6%	-100.0%
Leslie	0	0	1	0	0	1	0.1%	-100.0%
Letcher	0	1	2	0	0	3	0.4%	-100.0%
Lewis	0	0	2	0	1	3	0.4%	100.0%
Lincoln	3	1	2	0	0	6	0.8%	-100.0%
Livingston	0	0	0	0	1	1	0.1%	N/A
Logan	3	0	2	1	5	11	1.5%	233.3%
Lyon	0	0	1	1	0	2	0.3%	-100.0%
Madison	2	3	2	2	2	11	1.5%	-11.1%
Magoffin	0	1	1	1	0	3	0.4%	-100.0%
Marion	1	1	0	1	0	3	0.4%	-100.0%
Marshall	2	0	2	0	0	4	0.6%	-100.0%
Martin	0	1	2	0	0	3	0.4%	-100.0%
Mason	0	0	2	0	2	4	0.6%	300.0%
McCracken	0	6	2	5	0	13	1.8%	-100.0%
McCreary	0	0	1	0	1	2	0.3%	300.0%
McLean	0	1	0	0	0	1	0.1%	-100.0%



Speed-Related Fatalities						Total 2009 - 2013		% Change: 2013 vs. prior 4-yr Avg.
County	2009	2010	2011	2012	2013	N	%	
Meade	6	1	2	1	1	11	1.5%	-60.0%
Menifee	0	0	1	0	0	1	0.1%	-100.0%
Mercer	0	1	1	1	1	4	0.6%	33.3%
Metcalf	2	1	0	0	1	4	0.6%	33.3%
Monroe	0	0	0	1	0	1	0.1%	-100.0%
Montgomery	5	1	0	0	0	6	0.8%	-100.0%
Morgan	0	1	2	0	1	4	0.6%	33.3%
Muhlenberg	0	0	2	1	1	4	0.6%	33.3%
Nelson	3	3	2	2	3	13	1.8%	20.0%
Nicholas	4	0	0	0	0	4	0.6%	-100.0%
Ohio	2	1	0	1	1	5	0.7%	0.0%
Oldham	1	0	2	2	1	6	0.8%	-20.0%
Owen	2	0	0	0	0	2	0.3%	-100.0%
Owsley	0	1	0	1	0	2	0.3%	-100.0%
Pendleton	2	0	0	2	1	5	0.7%	0.0%
Perry	0	2	1	0	0	3	0.4%	-100.0%
Pike	1	3	1	7	8	20	2.8%	166.7%
Powell	0	0	1	0	0	1	0.1%	-100.0%
Pulaski	1	2	1	2	3	9	1.2%	100.0%
Robertson	0	0	0	0	0	0	0.0%	N/A
Rockcastle	0	0	0	3	0	3	0.4%	-100.0%
Rowan	2	0	0	0	1	3	0.4%	100.0%
Russell	1	0	1	0	1	3	0.4%	100.0%
Scott	1	1	0	0	1	3	0.4%	100.0%
Shelby	2	0	0	1	2	5	0.7%	166.7%
Simpson	0	0	2	0	1	3	0.4%	100.0%
Spencer	1	0	3	2	0	6	0.8%	-100.0%
Taylor	0	0	1	0	0	1	0.1%	-100.0%
Todd	1	1	1	0	0	3	0.4%	-100.0%
Trigg	0	2	0	4	0	6	0.8%	-100.0%
Trimble	0	0	0	1	0	1	0.1%	-100.0%
Union	0	1	0	0	0	1	0.1%	-100.0%
Warren	4	0	5	0	3	12	1.7%	33.3%
Washington	0	1	0	0	0	1	0.1%	-100.0%
Wayne	0	1	3	3	0	7	1.0%	-100.0%
Webster	0	0	0	0	0	0	0.0%	N/A
Whitley	2	0	1	3	2	8	1.1%	33.3%
Wolfe	0	0	1	0	1	2	0.3%	300.0%
Woodford	3	6	0	0	1	10	1.4%	-55.6%
<b>Total</b>	<b>154</b>	<b>154</b>	<b>141</b>	<b>151</b>	<b>125</b>	<b>725</b>	<b>100.0%</b>	<b>-16.7%</b>



**Table 42. Speeding-Related Fatalities by County: Rate per 100,000 Population**

<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Adair</b>	0.00	0.00	0.00	10.71	5.34
<b>Allen</b>	0.00	5.01	0.00	4.95	4.92
<b>Anderson</b>	0.00	0.00	9.24	0.00	0.00
<b>Ballard</b>	0.00	0.00	0.00	0.00	0.00
<b>Barren</b>	4.74	9.49	4.73	2.35	13.94
<b>Bath</b>	0.00	17.23	17.03	16.95	0.00
<b>Bell</b>	0.00	0.00	0.00	0.00	3.59
<b>Boone</b>	6.81	4.19	2.46	1.62	3.21
<b>Bourbon</b>	9.99	5.01	5.00	0.00	5.00
<b>Boyd</b>	0.00	0.00	6.06	0.00	0.00
<b>Boyle</b>	3.53	0.00	0.00	3.49	0.00
<b>Bracken</b>	0.00	0.00	0.00	0.00	0.00
<b>Breathitt</b>	0.00	0.00	7.22	0.00	0.00
<b>Breckinridge</b>	10.01	0.00	0.00	4.98	0.00
<b>Bullitt</b>	0.00	2.69	0.00	1.32	0.00
<b>Butler</b>	0.00	7.87	46.78	0.00	0.00
<b>Caldwell</b>	0.00	0.00	7.71	7.73	0.00
<b>Calloway</b>	5.42	0.00	7.99	2.66	13.28
<b>Campbell</b>	0.00	3.31	3.30	3.30	1.10
<b>Carlisle</b>	0.00	19.60	19.81	19.86	20.00
<b>Carroll</b>	9.21	0.00	0.00	9.17	0.00
<b>Carter</b>	0.00	3.61	10.88	10.97	0.00
<b>Casey</b>	0.00	6.26	0.00	6.22	6.22
<b>Christian</b>	2.72	4.04	4.08	1.33	8.09
<b>Clark</b>	0.00	0.00	2.81	8.38	0.00
<b>Clay</b>	4.56	9.22	23.02	23.20	4.68
<b>Clinton</b>	0.00	9.74	0.00	0.00	9.86
<b>Crittenden</b>	0.00	21.48	10.71	0.00	0.00
<b>Cumberland</b>	0.00	29.20	29.27	0.00	0.00
<b>Daviess</b>	3.12	3.10	0.00	2.04	0.00
<b>Edmonson</b>	8.25	8.22	0.00	0.00	0.00
<b>Elliott</b>	0.00	0.00	0.00	0.00	0.00
<b>Estill</b>	0.00	6.81	0.00	0.00	0.00
<b>Fayette</b>	2.73	1.01	2.98	3.60	0.97
<b>Fleming</b>	0.00	0.00	6.89	0.00	0.00
<b>Floyd</b>	5.05	0.00	5.10	7.70	7.75
<b>Franklin</b>	2.03	4.06	10.12	4.02	2.01
<b>Fulton</b>	0.00	0.00	0.00	45.98	0.00
<b>Gallatin</b>	11.72	23.26	0.00	0.00	0.00
<b>Garrard</b>	17.75	0.00	0.00	0.00	0.00



County	2009	2010	2011	2012	2013
Grant	4.05	8.11	0.00	8.17	0.00
Graves	8.12	2.69	5.33	2.66	5.34
Grayson	3.90	0.00	0.00	0.00	3.85
Green	0.00	0.00	0.00	0.00	8.94
Greenup	2.70	5.42	5.43	0.00	0.00
Hancock	0.00	0.00	0.00	11.52	0.00
Hardin	3.95	6.55	1.86	2.80	2.77
Harlan	0.00	10.26	0.00	3.50	0.00
Harrison	15.88	15.93	0.00	5.37	5.40
Hart	0.00	0.00	5.48	0.00	5.38
Henderson	6.52	4.32	0.00	0.00	2.16
Henry	6.44	0.00	6.48	0.00	12.95
Hickman	0.00	0.00	62.71	0.00	0.00
Hopkins	8.52	4.26	0.00	2.14	2.14
Jackson	7.43	0.00	0.00	0.00	7.45
Jefferson	3.26	3.50	1.34	2.40	2.38
Jessamine	8.31	2.05	0.00	2.01	1.99
Johnson	0.00	0.00	0.00	4.28	4.26
Kenton	2.51	2.50	0.62	1.24	0.61
Knott	6.04	0.00	0.00	0.00	0.00
Knox	0.00	6.27	3.14	22.06	3.15
Larue	0.00	0.00	0.00	21.20	7.11
Laurel	3.42	8.48	3.37	11.77	5.04
Lawrence	0.00	6.30	0.00	6.31	6.31
Lee	0.00	50.80	0.00	0.00	0.00
Leslie	0.00	0.00	8.90	0.00	0.00
Letcher	0.00	4.07	8.18	0.00	0.00
Lewis	0.00	0.00	14.41	0.00	7.24
Lincoln	12.11	4.04	8.09	0.00	0.00
Livingston	0.00	0.00	0.00	0.00	10.68
Logan	11.16	0.00	7.46	3.75	18.60
Lyon	0.00	0.00	12.02	11.97	0.00
Madison	2.43	3.61	2.38	2.36	2.34
Magoffin	0.00	7.50	7.57	7.67	0.00
Marion	5.06	5.04	0.00	4.98	0.00
Marshall	6.37	0.00	6.39	0.00	0.00
Martin	0.00	7.76	15.69	0.00	0.00
Mason	0.00	0.00	11.33	0.00	11.58
McCracken	0.00	9.15	3.04	7.63	0.00
McCreary	0.00	0.00	5.47	0.00	5.56
McLean	0.00	10.51	0.00	0.00	0.00



<b>County</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Meade</b>	21.12	3.49	6.77	3.42	3.42
<b>Menifee</b>	0.00	0.00	15.83	0.00	0.00
<b>Mercer</b>	0.00	4.68	4.70	4.70	4.68
<b>Metcalf</b>	19.87	9.89	0.00	0.00	10.02
<b>Monroe</b>	0.00	0.00	0.00	9.24	0.00
<b>Montgomery</b>	18.93	3.77	0.00	0.00	0.00
<b>Morgan</b>	0.00	7.18	14.34	0.00	7.47
<b>Muhlenberg</b>	0.00	0.00	6.40	3.21	3.21
<b>Nelson</b>	6.98	6.88	4.55	4.51	6.74
<b>Nicholas</b>	56.14	0.00	0.00	0.00	0.00
<b>Ohio</b>	8.37	4.20	0.00	4.15	4.17
<b>Oldham</b>	1.67	0.00	3.30	3.26	1.60
<b>Owen</b>	18.33	0.00	0.00	0.00	0.00
<b>Owsley</b>	0.00	20.99	0.00	21.18	0.00
<b>Pendleton</b>	13.53	0.00	0.00	13.69	6.86
<b>Perry</b>	0.00	6.96	3.48	0.00	0.00
<b>Pike</b>	1.53	4.62	1.54	10.91	12.62
<b>Powell</b>	0.00	0.00	7.90	0.00	0.00
<b>Pulaski</b>	1.59	3.17	1.57	3.15	4.69
<b>Robertson</b>	0.00	0.00	0.00	0.00	0.00
<b>Rockcastle</b>	0.00	0.00	0.00	17.64	0.00
<b>Rowan</b>	8.57	0.00	0.00	0.00	4.25
<b>Russell</b>	5.67	0.00	5.68	0.00	5.63
<b>Scott</b>	2.16	2.11	0.00	0.00	2.00
<b>Shelby</b>	4.81	0.00	0.00	2.29	4.52
<b>Simpson</b>	0.00	0.00	11.51	0.00	5.62
<b>Spencer</b>	5.89	0.00	17.26	11.48	0.00
<b>Taylor</b>	0.00	0.00	4.04	0.00	0.00
<b>Todd</b>	8.01	8.03	8.02	0.00	0.00
<b>Trigg</b>	0.00	13.94	0.00	27.69	0.00
<b>Trimble</b>	0.00	0.00	0.00	11.38	0.00
<b>Union</b>	0.00	6.66	0.00	0.00	0.00
<b>Warren</b>	3.56	0.00	4.33	0.00	2.53
<b>Washington</b>	0.00	8.50	0.00	0.00	0.00
<b>Wayne</b>	0.00	4.80	14.31	14.41	0.00
<b>Webster</b>	0.00	0.00	0.00	0.00	0.00
<b>Whitley</b>	5.56	0.00	2.79	8.45	5.59
<b>Wolfe</b>	0.00	0.00	13.62	0.00	13.80
<b>Woodford</b>	12.14	23.98	0.00	0.00	3.96
<b>County Average</b>	<b>3.57</b>	<b>3.54</b>	<b>3.23</b>	<b>3.45</b>	<b>2.84</b>



**Table 43. Speeding-Related Fatalities by Posted Speed Limit**

	Kentucky					Total 2009 - 2013**		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=154)	(N=154)	(N=141)	(N=151)	(N=125)	(N=725)	(N=5,896)	(N=51,115)
Posted Speed								
30 or less	11	5	3	7	4	4.1%	8.1%	12.5%
35	24	30	10	33	16	15.6%	12.7%	12.4%
40	0	0	1	0	1	0.3%	4.5%	7.2%
45	18	22	13	9	16	10.8%	16.6%	14.5%
50	4	0	0	0	0	0.6%	5.3%	4.5%
55	88	78	92	86	69	57.0%	41.2%	26.7%
60	0	0	0	0	0	0.0%	1.3%	3.5%
65+	9	19	12	12	12	8.8%	9.0%	15.3%
No Limit	0	0	0	0	0	0.0%	0.1%	0.3%
Unknown/Not Reported	0	0	10	4	7	2.9%	1.2%	3.1%
<b>Total</b>	<b>154</b>	<b>154</b>	<b>141</b>	<b>151</b>	<b>125</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\*Highlighting is to help the reader identify cells with higher numbers/percentages. Starting in 2010, the 'Unknown' category also includes 'Not Reported' speed limits

\*\*See note in appendix on speed limits in 2010.

**Table 44. Speeding-Related Fatalities by Road Type**

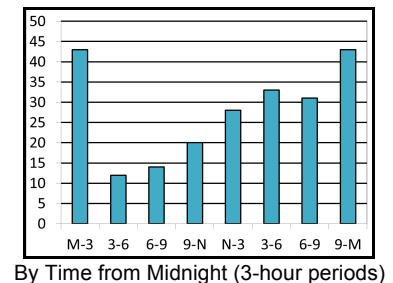
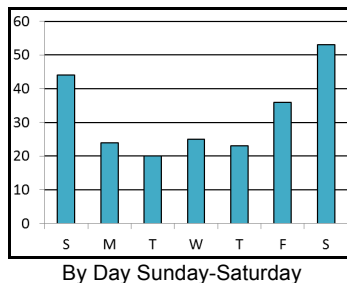
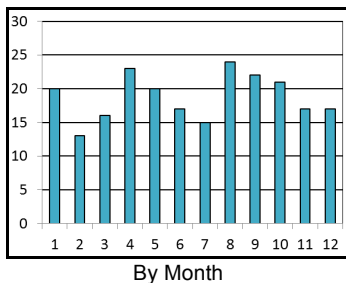
	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=154)	(N=154)	(N=141)	(N=151)	(N=125)	(N=725)	(N=5,896)	(N=51,115)
Road Type								
Interstate/Expressway	11	18	13	15	15	9.5%	13.0%	16.4%
Arterial	38	47	52	49	28	31.0%	36.7%	36.7%
Collector	66	50	57	48	50	36.8%	25.9%	21.6%
Local	39	39	19	39	32	22.7%	22.1%	24.3%
Unknown	0	0	0	0	0	0.0%	2.3%	1.0%
<b>Total</b>	<b>154</b>	<b>154</b>	<b>141</b>	<b>151</b>	<b>125</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Highlighting is to help the reader identify cells with higher numbers/percentages.



**Table 45. Speeding-Related Fatal Crashes by Month, Day of Week, and Time of Day: Totals 2009-2013**

	Kentucky (N=636)		Region (N=5,305)	U.S. (N=45,927)
	N	%	%	%
<b>MONTH</b>				
January	42	6.6%	7.4%	7.5%
February	44	6.9%	6.2%	6.8%
March	54	8.5%	7.7%	7.7%
April	65	10.2%	8.7%	8.3%
May	53	8.3%	9.7%	9.0%
June	70	11.0%	9.3%	8.8%
July	61	9.6%	9.1%	9.3%
August	59	9.3%	8.7%	9.4%
September	48	7.5%	8.6%	8.6%
October	50	7.9%	9.1%	8.6%
November	43	6.8%	7.8%	8.0%
December	47	7.4%	7.7%	8.1%
<b>DAY OF WEEK</b>				
Sunday	108	17.0%	17.7%	18.6%
Monday	66	10.4%	12.2%	11.5%
Tuesday	80	12.6%	11.6%	10.8%
Wednesday	79	12.4%	11.1%	11.1%
Thursday	84	13.2%	12.8%	12.2%
Friday	95	14.9%	14.7%	14.8%
Saturday	124	19.5%	19.9%	20.9%
<b>TIME OF DAY</b>				
Midnight-3am	82	12.9%	17.5%	17.9%
3am-6am	65	10.2%	9.1%	9.7%
6am-9am	64	10.1%	8.8%	8.2%
9am-Noon	58	9.1%	7.8%	7.7%
Noon-3pm	69	10.8%	10.8%	10.8%
3pm-6pm	119	18.7%	14.6%	14.2%
6pm-9pm	91	14.3%	15.6%	15.2%
9pm-Midnight	88	13.8%	15.6%	15.7%
Unknown	0	0.0%	0.1%	0.7%





**Table 46. Drivers Involved in Fatal Crashes with Previous Speeding Convictions\***

	Drivers with previous speeding convictions**						
	2009	2010	2011	2012	2013	Total 2009 - 2013	
	%	%	%	%	%	N	%
<b>Kentucky</b>	14.9%	11.1%	9.2%	9.9%	11.6%	574	11.4%
<b>Region</b>	18.3%	17.5%	16.5%	15.2%	14.4%	4,150	16.4%
<b>U.S.</b>	18.4%	18.1%	17.7%	16.4%	15.6%	38,609	17.2%

\*Recorded speeding convictions that occurred within three years prior to the crash

\*\* Counts exclude instances in which no occupant could be identified as a driver.

**Table 47. Drivers Involved in Fatal Crashes with Previous Speeding Convictions by Age Group and Sex: Totals 2009-2013**

	Kentucky		Region	U.S.	Kentucky				Region %	U.S. %
	(N=574)	%	(N=4,150)	(N=38,609)	Females		Males		Males	Males
Age Group					N	%	N	%		
<b>16-20</b>	63	11.0%	10.3%	10.4%	21	33.3%	42	66.7%	75.4%	77.4%
<b>21-24</b>	80	13.9%	16.9%	17.7%	14	17.5%	66	82.5%	75.3%	77.8%
<b>25-34</b>	140	24.4%	26.1%	26.2%	30	21.4%	110	78.6%	75.5%	77.1%
<b>35-44</b>	113	19.7%	18.7%	17.9%	27	23.9%	86	76.1%	75.3%	78.7%
<b>45-54</b>	95	16.6%	14.4%	14.6%	13	13.7%	82	86.3%	80.6%	80.3%
<b>55-64</b>	57	9.9%	9.1%	8.3%	5	8.8%	52	91.2%	76.7%	80.5%
<b>65+</b>	26	4.5%	4.5%	4.8%	4	15.4%	22	84.6%	85.6%	82.4%
<b>Unknown</b>	0	0.0%	0.0%	0.0%	0	N/A	0	N/A	N/A	40.0%
<b>Total</b>	<b>574</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>114</b>	<b>19.9%</b>	<b>460</b>	<b>80.1%</b>	<b>76.7%</b>	<b>78.5%</b>

\*Highlighting is to help the reader identify cells with higher numbers/percentages.



## **IV. MOTORCYCLE CRASHES**



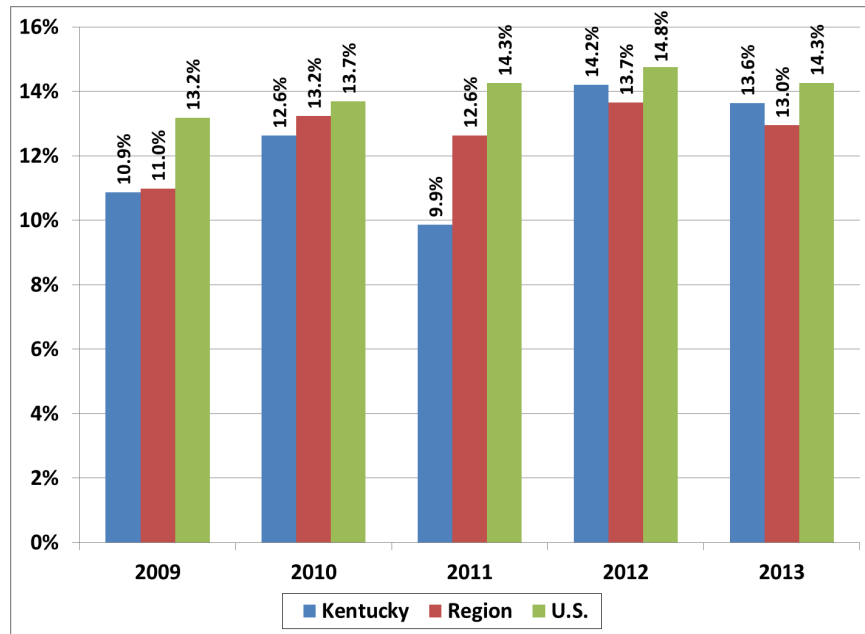
## MOTORCYCLE CRASHES – KEY FINDINGS

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In the period 2009-2013:

- In Kentucky, the percentage of fatalities that were motorcyclists was below the proportion of the Region for the first three years of the period (2009-2011), and below that of the Nation throughout the five-year period (2009-2013). In 2013, 13.6% of Kentucky's traffic fatalities were motorcyclists, compared to 13.0% in Region 3, and 14.3% Nationwide (Figure 22).
- The majority of 2009-2013 motorcycle fatal crashes occurred on Fridays, Saturdays, and Sundays in Kentucky (58.2%), across Region 3 (57.8%), and throughout the Nation (56.8%); the highest proportions of these crashes occurred on Saturdays in each of these three jurisdictions. Across the State, Region, and Nation, the majority of such crashes occurred between the hours of noon and 9 p.m. (64.2%, 59.5%, and 57.1%, respectively). In Kentucky, most motorcycle fatal crashes occurred during the months of June, July, and September (45.7%); in contrast, the highest concentration of such crashes occurred during the months of June, July, and August across the Region (40.5%) and throughout the Nation (38.4%) (Table 48).
- During the five-year period, 22.4% of Kentucky's motorcyclist fatalities were between the ages of 35 and 44. In both the Region and the Nation, the plurality of motorcyclist fatalities were between the ages of 45 and 54 (at 23.4% and 22.2%, respectively). Males accounted for 89.2% of the State's motorcyclist fatalities, 91.2% in Region 3 and 90.6% in the U.S. as a whole (Table 49).
- Kentucky law requires helmet use by riders under the age of 21 or licensed less than one year, and by those with no medical insurance. From 2009 through 2013, 62.1% of Kentucky's motorcyclist fatalities were *not* using a helmet. This percentage is considerably higher than the percentages of nonuse seen for Region 3 (21.2%) and the U.S. as a whole (40.9%) during the same years. In Kentucky, those ages 45-54 accounted for the largest percentage of fatally-injured motorcyclists who were unhelmeted (72.9%) (Table 50).
- During the 2009-2013 period in Kentucky, 34.2% of all fatally-injured motorcycle operators who were tested for BAC had a BAC of at least 0.01; this percentage is slightly lower than those seen for Region 3 (36.7%) and for the U.S. as a whole (38.8%). In Kentucky, those ages 35-44 accounted for the largest proportion of motorcycle operators that had a BAC of at least 0.01 (49.3%) (Table 51).
- Throughout the five years (2009-2013) in Kentucky, 22.2% of all motorcycle operators were killed in a crash where speeding was a factor, compared to 35.0% across Region 3 and 38.5% Nationwide. In Kentucky, those ages 16-20 accounted for the largest proportion of motorcycle operators killed in a crash that involved speeding (40.9%) (Table 51).
- In fatal crashes involving motorcycles in Kentucky, 49.5% of motorcycle operators had at least one driver factor reported, a percentage similar to that of the operators of other vehicles (48.2%). Throughout the five years, *driving too fast* was the most commonly reported driver factor for motorcyclists in Kentucky (19.3%). For the operators of other vehicles, *failure to yield* (26.1%) was the most reported driver factor (Table 52).



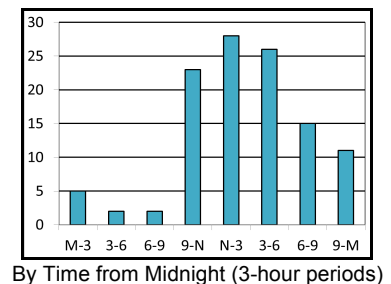
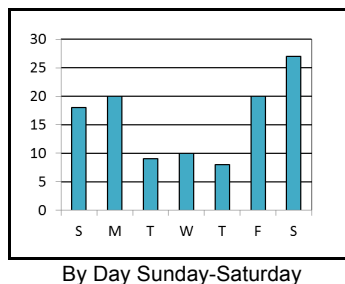
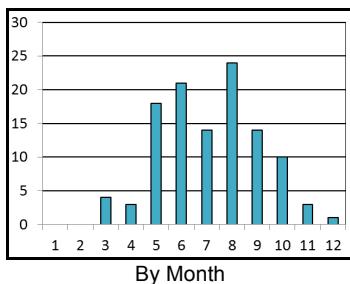


**Figure 22. Motorcyclist Fatalities as Percent of Total Fatalities**



**Table 48. Motorcycle Fatal Crashes by Month, Day of Week, and Time of Day: Totals 2009-2013**

	Kentucky (N=431)		Region (N=2,314)	U.S. (N=22,632)
	N	%	%	%
<b>MONTH</b>				
January	5	1.2%	2.2%	3.1%
February	8	1.9%	2.3%	3.4%
March	22	5.1%	4.8%	6.4%
April	39	9.0%	10.8%	9.1%
May	55	12.8%	11.6%	11.5%
June	72	16.7%	14.2%	12.4%
July	69	16.0%	13.2%	12.7%
August	54	12.5%	13.1%	13.3%
September	56	13.0%	12.1%	11.4%
October	35	8.1%	8.9%	8.5%
November	12	2.8%	4.9%	5.3%
December	4	0.9%	1.7%	2.8%
<b>DAY OF WEEK</b>				
Sunday	79	18.3%	18.6%	18.8%
Monday	49	11.4%	10.2%	10.1%
Tuesday	35	8.1%	9.7%	9.9%
Wednesday	41	9.5%	9.9%	11.2%
Thursday	55	12.8%	12.5%	12.0%
Friday	71	16.5%	15.3%	15.3%
Saturday	101	23.4%	23.9%	22.7%
Unknown	0	0.0%	0.0%	0.0%
<b>TIME OF DAY</b>				
Midnight-3am	31	7.2%	8.1%	9.5%
3am-6am	15	3.5%	3.5%	4.0%
6am-9am	20	4.6%	5.1%	5.6%
9am-Noon	38	8.8%	9.6%	9.0%
Noon-3pm	81	18.8%	17.2%	16.1%
3pm-6pm	107	24.8%	21.5%	21.3%
6pm-9pm	89	20.6%	20.8%	19.7%
9pm-Midnight	50	11.6%	13.9%	14.2%
Unknown	0	0.0%	0.2%	0.6%





**Table 49. Motorcyclist Fatalities by Age Group and Sex: Totals 2009-2013**

Fatalities by Age					Fatalities by Age and Sex					
	Kentucky		Region	U.S.	Kentucky				Region % Males	U.S. % Males
	(N=446)	%	(N=2,373)	(N=23,271)	Females		Males			
Age Group					N	%	N	%		
< 16	7	1.6%	0.7%	0.4%	1	14.3%	6	85.7%	81.3%	83.7%
16-20	23	5.2%	5.1%	4.9%	1	4.3%	22	95.7%	94.2%	90.3%
21-24	48	10.8%	9.2%	9.8%	5	10.4%	43	89.6%	94.0%	93.5%
25-34	75	16.8%	19.8%	20.3%	7	9.3%	68	90.7%	92.6%	93.0%
35-44	100	22.4%	20.1%	19.3%	13	13.0%	87	87.0%	89.1%	88.7%
45-54	85	19.1%	23.4%	22.2%	9	10.6%	76	89.4%	89.2%	88.1%
55-64	76	17.0%	14.9%	16.3%	8	10.5%	68	89.5%	92.6%	90.5%
65-74	28	6.3%	5.7%	5.4%	4	14.3%	24	85.7%	91.9%	93.5%
75+	4	0.9%	1.0%	1.3%	0	0.0%	4	100.0%	91.7%	96.3%
Unknown	0	0.0%	0.1%	0.0%	0	N/A	0	N/A	100.0%	66.7%
Total	446	100.0%	100.0%	100.0%	48	10.8%	398	89.2%	91.2%	90.6%

\*Highlighting is to help the reader identify cells with higher numbers/percentages.



**Table 50. Motorcyclist Fatalities by Age Group and Helmet Use\*: Totals 2009-2013**

Age Group	Motorcyclist Fatalities	Helmet Used		Helmet Not Used	
		N	%	N	%
<16	7	2	28.6%	5	71.4%
16-20	23	12	52.2%	11	47.8%
21-24	48	18	37.5%	30	62.5%
25-34	75	36	48.0%	39	52.0%
35-44	100	35	35.0%	65	65.0%
45-54	85	23	27.1%	62	72.9%
55-64	76	28	36.8%	48	63.2%
65+	32	15	46.9%	17	53.1%
Unknown	0	0	N/A	0	N/A
<b>KY**</b>	446	169	37.9%	277	62.1%
<b>Region</b>	2,373	1,859	78.3%	503	21.2%
<b>U.S.</b>	23,271	13,163	56.6%	9,528	40.9%

\*Helmet use percentage based on total fatalities.

\*\*State law requires use by riders under the age of 21 or licensed less than 1 year, and by those without medical insurance.

**Table 51. Motorcycle Operator Fatalities: Operator Alcohol Involvement and Crash-Level Speed Involvement: Totals 2009-2013**

Age Group	MC Operator Fatalities	BAC ≥ 0.01*			Speeding Involved**	
		# Tested	# ≥ 0.01	%	#	%
<16	5	3	0	0.0%	1	20.0%
16-20	22	14	1	7.1%	9	40.9%
21-24	44	35	12	34.3%	15	34.1%
25-34	69	57	23	40.4%	28	40.6%
35-44	92	71	35	49.3%	22	23.9%
45-54	79	59	21	35.6%	5	6.3%
55-64	70	46	11	23.9%	11	15.7%
65+	29	19	1	5.3%	0	0.0%
Unknown	0	0	0	N/A	0	N/A
<b>KY</b>	410	304	104	34.2%	91	22.2%
<b>Region</b>	2,244	1,881	691	36.7%	785	35.0%
<b>U.S.</b>	21,765	16,965	6,583	38.8%	8,385	38.5%

\* Based on actual state BAC data

\*\*Refers to entire crash event.



**Table 52. Fatal Crashes Involving Motorcycles: Operator Factors**

	2009		2010		2011		2012		2013		Total 2009 - 2013	
	MC	Other Op	MC	Other Op	MC	Other Op	MC	Other Op	MC	Other Op	MC	Other Op
	(N=87)	(N=52)	(N=92)	(N=51)	(N=71)	(N=33)	(N=103)	(N=74)	(N=87)	(N=47)	(N=440)	(N=257)
<b>Factors</b>	%*	%*	%*	%*	%*	%*	%*	%*	%*	%*	%*	%*
None reported	37.9%	38.5%	51.1%	58.8%	56.3%	45.5%	53.4%	58.1%	54.0%	53.2%	50.5%	51.8%
One or more factors reported	62.1%	61.5%	48.9%	41.2%	43.7%	54.5%	46.6%	41.9%	46.0%	46.8%	<b>49.5%</b>	<b>48.2%</b>
<b>Top Factors**</b>												
Driving too fast for conditions and/or in excess of posted speed limit	13.8%	1.9%	21.7%	2.0%	25.4%	3.0%	15.5%	1.4%	21.8%	4.3%	<b>19.3%</b>	2.3%
Failure to remain in proper lane	8.0%	3.8%	1.1%	0.0%	0.0%	0.0%	3.9%	1.4%	4.6%	10.6%	3.6%	3.1%
Inattentive (2006-2009), Distracted (2010 and later), Careless (2012)***	31.0%	32.7%	20.7%	23.5%	9.9%	33.3%	4.9%	5.4%	1.1%	4.3%	13.4%	17.9%
Operating vehicle in erratic, reckless manner	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.5%	0.4%
Operator inexperience	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.9%	0.0%
Failure to yield	3.4%	28.8%	0.0%	25.5%	1.4%	33.3%	3.9%	21.6%	3.4%	25.5%	2.5%	<b>26.1%</b>

\*Driver may have multiple factors reported. Highlighting is to help reader distinguish MC operator percentages from Other operator percentages.

\*\*Percentages based on **total operators/drivers at the vehicle level**. 'None reported' includes instances in which a violation, driver factor, distraction, or speeding was marked as 'Unknown', 'Not Reported', or where data are missing.

\*\*\*Prior to 2010, Inattentive was a single element—Inattentive/Careless (Talking, Eating, Car Phones, etc.). In 2010, many individual factors that had been subsumed the Inattentive element were broken out into their own separate categories, as Distraction became an entirely new table in FARS. In 2012, Careless was added as a new variable.



## **V. RESTRAINT USE**



## OCCUPANT RESTRAINT – KEY FINDINGS

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### In the period 2009-2013:

- In Kentucky, observed seat belt usage ranged between 79.7% (2009) and 85.0% (2013) during the five-year period, and remained below the National rate, which ranged from 84.0% (2009 and 2011) to 87.0% (2013) (Figure 23).
- Kentucky's primary seat belt law applies to occupants ages 6 and younger who are more than 50 inches tall, and to all occupants ages 7 and older.
- In Kentucky, restraint use among fatally-injured passenger vehicle occupants remained below that of the Region and the Nation during each of the five years (2009-2013), for *all* crashes and *night* crashes; the exception being in 2013, where the State's rate was above that of the Nation for *all* crashes and *night* crashes. In every year, in every jurisdiction (State, Region, Nation), restraint use among fatally-injured passenger vehicle occupants in crashes occurring at night was lower than restraint use as a whole (Table 53).
- In Kentucky, the highest percentages of fatally injured occupants *not* wearing their seat belts were ages 35-44 (67.0%), closely followed by those ages 25-34 (66.7%). When looking at restraint *use* among fatally-injured passenger vehicle occupants, only those ages 15 and younger and those ages 55 and older displayed over 50% restraint use (Table 54).
- During the 2009-2013 period in Kentucky, 49.3% of all fatally-injured occupants of *cars* used restraints, compared to 32.9% of fatally-injured occupants of *pickup trucks*, and 43.3% of those in the *other (incl. SUV)* category. In terms of change, for the *car* vehicle category, the percentage of restraint use by fatally-injured occupants in Kentucky increased by 5.7% in 2013 (when compared to the average of the previous four years); during the same timeframe, restraint use for the *pickup* category increased by 10.8% Statewide, and restraint use for the *other (incl. SUV)* category increased by 7.7% (Table 55).



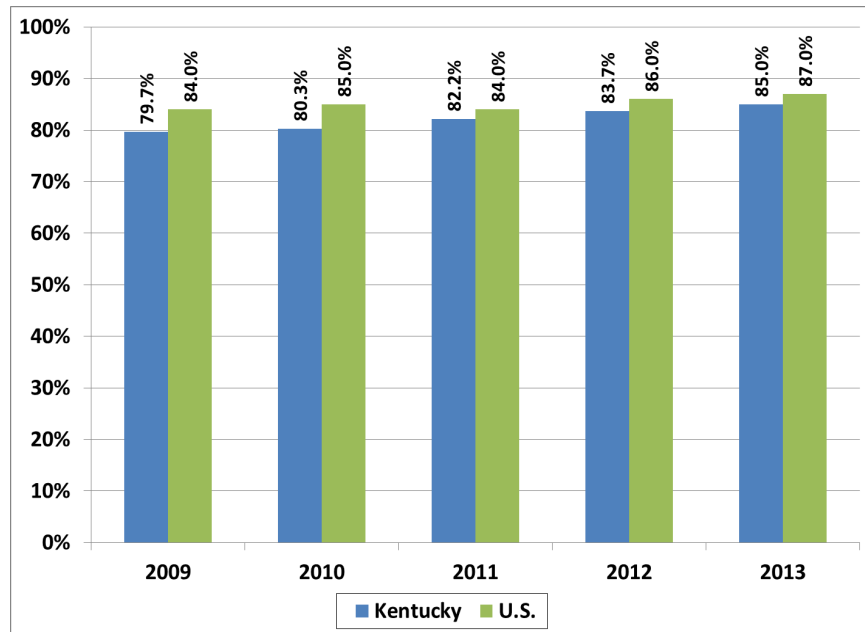


Figure 23. Observed Seat Belt Usage Rates, 2009-2013

Table 53. Restraint Use of Fatally-Injured Passenger Vehicle Occupants

	2009	2010	2011	2012	2013
<b>Restraint Used</b>					
Kentucky	42.8%	44.2%	43.2%	42.7%	47.3%
Region	45.9%	45.7%	45.0%	46.2%	48.7%
U.S.	43.5%	44.8%	44.4%	44.7%	46.3%
<b>Restraint Used Night*</b>					
Kentucky	31.3%	31.1%	25.0%	30.7%	34.9%
Region	33.7%	32.3%	30.3%	34.6%	38.0%
U.S.	32.2%	32.3%	33.3%	33.6%	33.7%

Restraint use percentage based on all fatalities

\*In crashes that occurred between 8 pm and 4 am.



**Table 54. Fatally-Injured Passenger Vehicle\* Occupants, Restraint Use by Age Group: Totals 2009-2013**

Age Group	Occupant Restraint Usage			
	N	Used	Not Used	Unknown
<5	36	75.0%	19.4%	5.6%
5-9	27	63.0%	37.0%	0.0%
10-15	38	57.9%	42.1%	0.0%
16-20	270	35.2%	64.4%	0.4%
21-24	251	38.2%	61.8%	0.0%
25-34	534	33.3%	66.7%	0.0%
35-44	373	32.7%	67.0%	0.3%
45-54	370	37.6%	62.2%	0.3%
55-64	297	55.2%	44.4%	0.3%
65-74	250	58.0%	41.6%	0.4%
75+	279	68.8%	31.2%	0.0%
Unknown	1	0.0%	100.0%	0.0%
<b>KY**</b>	2,726	43.9%	55.8%	0.3%
<b>Region</b>	13,051	46.3%	49.1%	4.7%
<b>U.S.</b>	109,947	44.7%	47.6%	7.7%

\* Automobiles, SUVs, and Pickup Trucks

\*\* Kentucky's primary seat belt law applies to occupants ages 6 and younger who are more than 50 inches tall, and to all occupants ages 7 and older.

Highlighting is to help reader identify cells discussed in the text.

**Table 55. Restraint Use of Fatally-Injured Occupants by Passenger Vehicle Type\***

	2009	2010	2011	2012	2013	Total 2009 - 2013	% Change: 2013 vs. Prior 4-yr Avg.
<b>Cars</b>							
Kentucky	47.4%	52.2%	45.6%	50.4%	51.7%	49.3%	5.7%
Region	54.0%	53.9%	51.7%	55.4%	56.3%	54.3%	4.8%
U.S.	53.9%	55.7%	54.5%	54.9%	57.1%	55.2%	4.3%
<b>Pickup</b>							
Kentucky	35.4%	28.8%	36.8%	28.6%	35.9%	32.9%	10.8%
Region	36.0%	32.4%	36.6%	33.2%	37.6%	35.1%	8.7%
U.S.	32.5%	35.0%	35.2%	35.2%	37.2%	35.0%	8.0%
<b>Other (incl. SUV)</b>							
Kentucky	41.1%	41.7%	46.0%	42.5%	46.2%	43.3%	7.7%
Region	43.4%	44.9%	43.7%	43.2%	48.4%	44.7%	10.4%
U.S.	42.7%	43.2%	43.9%	44.2%	45.9%	43.9%	5.5%

\* Where restraint use is known



## **VI. PEDESTRIAN AND BICYCLIST CRASHES**



## PEDESTRIAN AND BICYCLIST CRASHES – KEY FINDINGS

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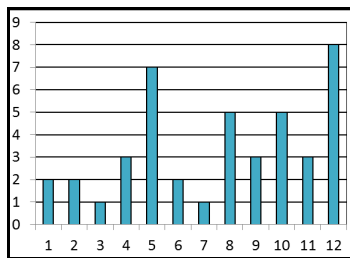
In the period 2009-2013:

- In Kentucky, the largest concentration of pedestrian fatal crashes occurred between 6 p.m. and midnight (51.0%), as it did in Region 3 (47.9%) and the Nation (47.4%). Such crashes were most frequent on Fridays and Saturdays in the State (34.2%), across the Region (34.9%), and throughout the U.S. as a whole (33.7%). In all three jurisdictions (State, Region, Nation), the months of October and November accounted for large proportions of pedestrian fatal crashes (20.4%, 20.4%, and 20.6%, respectively) (Table 56).
- The 10 cities with the largest number of pedestrian fatalities in Kentucky accounted for 40.2% of all pedestrian fatalities in the State. Louisville was the city with the highest pedestrian fatality count during the 2009-2013 period (62 fatalities and 24.2% of the total) (Table 57).
- Throughout the five years, persons ages 45-54 constituted a plurality of pedestrian fatalities in Kentucky (17.6%), across the Region (20.1%), and throughout the U.S. as a whole (19.3%) (Table 58).
- From 2009 through 2013, males represented 66.8% of the State's pedestrian fatalities, 70.9% of the Region's, and 69.0% of the Nation's (Table 58).
- During the five-year period, 26.8% of pedestrians killed in Kentucky with a known BAC had a BAC of 0.08 or greater, compared to 36.4% for Region 3 and 38.0% for the U.S. as a whole. In Kentucky, among fatally injured pedestrians with a known BAC, a BAC of at least 0.08 was *most common* in the 21-24 age group (43.8%). In Region 3, those ages 45-54 had the *highest* percentage (48.2%), as did those ages 25-34 Nationwide (52.1%) (Table 59).
- From 2009 through 2013, there were 23 bicyclist fatalities in Kentucky, with 3 occurring in 2013, resulting in a 40.0% decrease when compared to the previous four-year average. In 2013, bicyclist fatalities fell by 17.6% Regionally, but *increased* by 11.4% Nationwide (Table 60).

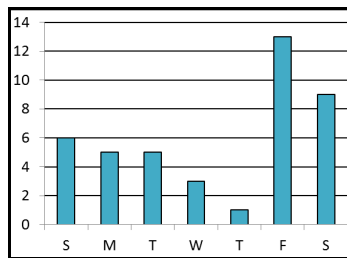


**Table 56. Pedestrian Fatal Crashes by Month, Day of Week, and Time of Day: Totals 2009-2013**

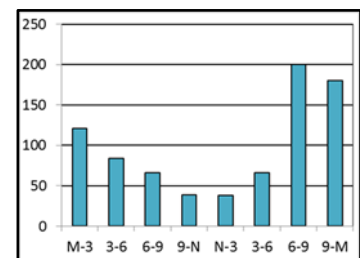
	Kentucky (N=251)		Region (N=2,257)		U.S. (N=22,077)	
	N	%	N	%	N	%
<b>MONTH</b>						
January	24	9.6%	182	8.1%	1903	8.6%
February	21	8.4%	163	7.2%	1701	7.7%
March	18	7.2%	166	7.4%	1742	7.9%
April	20	8.0%	165	7.3%	1536	7.0%
May	17	6.8%	156	6.9%	1533	6.9%
June	19	7.6%	165	7.3%	1460	6.6%
July	17	6.8%	182	8.1%	1637	7.4%
August	23	9.2%	187	8.3%	1657	7.5%
September	19	7.6%	201	8.9%	1928	8.7%
October	26	10.4%	222	9.8%	2250	10.2%
November	25	10.0%	240	10.6%	2306	10.4%
December	22	8.8%	228	10.1%	2424	11.0%
<b>DAY OF WEEK</b>						
Sunday	32	12.7%	289	12.8%	3095	14.0%
Monday	33	13.1%	272	12.1%	2831	12.8%
Tuesday	26	10.4%	313	13.9%	2823	12.8%
Wednesday	38	15.1%	285	12.6%	2877	13.0%
Thursday	36	14.3%	309	13.7%	3009	13.6%
Friday	42	16.7%	382	16.9%	3595	16.3%
Saturday	44	17.5%	407	18.0%	3847	17.4%
<b>TIME OF DAY</b>						
Midnight-3am	20	8.0%	267	11.8%	2664	12.1%
3am-6am	21	8.4%	237	10.5%	2118	9.6%
6am-9am	21	8.4%	185	8.2%	1997	9.0%
9am-Noon	17	6.8%	120	5.3%	1201	5.4%
Noon-3pm	11	4.4%	135	6.0%	1258	5.7%
3pm-6pm	33	13.1%	226	10.0%	2267	10.3%
6pm-9pm	59	23.5%	533	23.6%	5579	25.3%
9pm-Midnight	69	27.5%	549	24.3%	4877	22.1%
Unknown	0	0.0%	5	0.2%	116	0.5%



By Month



By Day Sunday-Saturday



By Time from Midnight (3-hour periods)



**Table 57. Pedestrian Fatalities by Top Cities**

City	2009	2010	2011	2012	2013	Total 2009 - 2013	
						N	%
Louisville	7	16	17	6	16	62	24.2%
Lexington	2	4	5	5	2	18	7.0%
Jeffersontown	1	1	0	1	1	4	1.6%
Covington	1	0	1	1	1	4	1.6%
Mouthcard	0	2	0	0	1	3	1.2%
Cynthiana	0	1	0	0	2	3	1.2%
Radcliff	1	0	0	1	1	3	1.2%
Erlanger	0	0	1	1	0	2	0.8%
Bowling Green	0	0	1	1	0	2	0.8%
Barbourville	0	0	1	1	0	2	0.8%
<b>Total Top Cities</b>	<b>12</b>	<b>24</b>	<b>26</b>	<b>17</b>	<b>24</b>	<b>103</b>	<b>40.2%</b>
<b>All Pedestrian Fatalities</b>	<b>41</b>	<b>61</b>	<b>50</b>	<b>49</b>	<b>55</b>	<b>256</b>	<b>100%</b>

**Table 58. Pedestrian Fatalities by Age Group and Sex: Totals 2009-2013**

Fatalities by Age					Fatalities by Age and Sex					
Age Group	Kentucky		Region	U.S.	Kentucky				Region % Males	U.S.% Males
	(N=256)	%	(N=2,291)	(N=22,418)	Females		Males			
					N	%	N	%		
<5	8	3.1%	1.7%	2.0%	4	50.0%	4	50.0%	59.0%	61.2%
5-9	3	1.2%	1.6%	1.6%	2	66.7%	1	33.3%	59.5%	61.8%
10-15	11	4.3%	3.2%	2.7%	7	63.6%	4	36.4%	61.6%	59.5%
16-20	16	6.3%	6.0%	5.7%	4	25.0%	12	75.0%	71.0%	69.9%
21-24	16	6.3%	7.6%	6.9%	7	43.8%	9	56.3%	73.6%	72.6%
25-34	40	15.6%	16.2%	14.0%	14	35.0%	26	65.0%	69.5%	71.8%
35-44	38	14.8%	14.4%	13.3%	10	26.3%	28	73.7%	72.9%	70.2%
45-54	45	17.6%	20.1%	19.3%	10	22.2%	35	77.8%	77.2%	72.8%
55-64	31	12.1%	14.0%	15.0%	8	25.8%	23	74.2%	71.6%	71.6%
65-74	32	12.5%	8.8%	9.0%	11	34.4%	21	65.6%	68.8%	64.8%
75+	16	6.3%	6.0%	10.2%	8	50.0%	8	50.0%	58.7%	58.5%
Unknown	0	0.0%	0.4%	0.5%	0	N/A	0	N/A	70.0%	75.0%
Total	256	100.0%	100.0%	100.0%	85	33.2%	171	66.8%	70.9%	69.0%

Highlighting is to help reader identify cells with higher numbers/percentages



**Table 59. Pedestrian Fatalities by Age Group With BAC: Totals 2009-2013**

Age Group	Kentucky 0.08 or greater			Region 0.08 or greater	U.S. 0.08 or greater
	N ≥ 0.08	N	N=51 of 190*	N=667 of 1,834*	N=5,900 of 15,547*
<16	0	8	0.00%	2.67%	2.39%
16-20	1	12	8.33%	21.24%	26.99%
21-24	7	16	43.75%	45.95%	51.79%
25-34	12	33	36.36%	46.56%	52.10%
35-44	12	35	34.29%	43.64%	49.05%
45-54	11	34	32.35%	48.21%	50.62%
55-64	5	23	21.74%	33.72%	35.85%
65+	3	29	10.34%	11.38%	9.63%
Unknown	0	0	N/A	N/A	52.31%
<b>Total</b>	<b>51</b>	<b>190</b>	<b>26.84%</b>	<b>36.37%</b>	<b>37.95%</b>

\*Persons with known BACs

Highlighting is to help reader identify cells with higher percentages.

**Table 60. Bicyclist Fatalities**

	2009	2010	2011	2012	2013	Total 2009- 2013	% Change: 2013 vs. prior 4-yr Avg.
Kentucky	5	7	2	6	3	23	-40.00%
Region	48	58	39	54	41	240	-17.59%
U.S.	628	623	682	734	743	3,410	11.44%



## **VII. YOUNG DRIVERS**



## YOUNG DRIVERS – KEY FINDINGS

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### In the period 2009-2013:

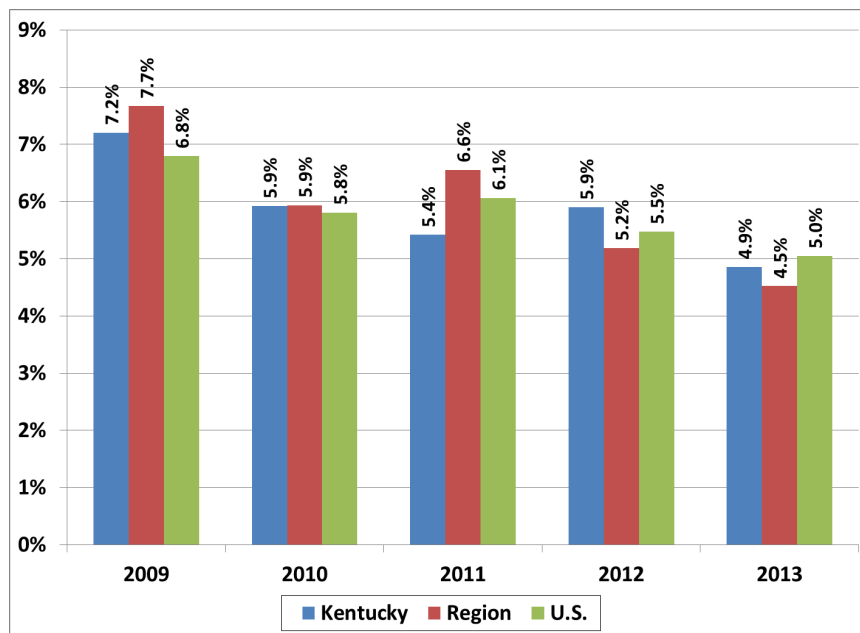
- In Kentucky, the number of fatal crashes involving young drivers (16-20 years old) decreased in 2013, by 19.4% when compared to the prior four-year average. Region 3 and the U.S. as a whole also experienced decreases in this index (-21.9% and -14.4%, respectively). The number of *young drivers killed* also decreased considerably in Kentucky, by 33.0% in 2013 when compared to the 2009-2012 average. Decreases were also experienced across Region 3 (-32.5%) and throughout the Nation (-17.8%) (Table 61).
- Throughout the five-year period (2009-2013), Kentucky's proportion of fatalities that were young drivers fluctuated with respect to the proportion of such fatalities across Region 3 and the Nation. In 2013, 4.9% of Kentucky's traffic fatalities were young drivers, compared to 4.5% for Region 3 and 5.0% Nationwide (Figure 24).
- Throughout the five years, the highest proportion of fatal crashes involving young drivers occurred between 3 p.m. and 6 p.m. in Kentucky (22.8%), across Region 3 (18.2%), and throughout the U.S. as a whole (17.0%). When looking at the days of the week, for each jurisdiction (State, Region, and Nation), the plurality of fatal crashes involving young drivers occurred on Fridays, Saturdays, and Sundays (49.9%, 52.7%, and 52.7%, respectively) (Table 62).
- In Kentucky, at least one driver-related factor was reported for 68.9% of young drivers involved in fatal crashes during the five-year period. *Driving too fast* was the most frequently reported factor for young drivers (23.1%) (Table 63).
- In Kentucky, a larger percentage of young drivers who were involved in fatal crashes had previous speeding convictions (13.0%) than did drivers of all ages (11.4%). Similarly, slightly more young drivers had previous speeding convictions in Region 3 and the Nation (17.5% Regionally and 18.3% Nationally) than did drivers of all ages (16.4% in Region 3 and 17.2% across the Nation) (Table 64).
- From 2009 through 2013, a larger percentage of Kentucky's young drivers who were involved in a fatal crash had a previous crash recorded (22.7%) than did all drivers (21.9%). This pattern is similar to that observed for Region 3 and the Nation, where younger drivers (17.1% Regionally and 13.0% Nationally) were more likely to have a previous crash recorded than drivers of all ages (15.0% in Region 3 and 11.4% across the Nation) (Table 64).
- Young drivers themselves made up the plurality of fatalities in Kentucky's young driver-involved fatal crashes (42.6%), as they did across Region 3 (42.8%) and throughout the Nation (40.3%) during the same years (2009-2013). In Kentucky, young drivers' passengers represented 21.7% of the fatalities in such crashes, and other road users accounted for 35.7% (Table 65).
- In Kentucky, the five counties with the largest percentages of young driver-involved fatalities during the five-year period were: Jefferson (7.7%); Fayette (3.6%); Pike (2.6%); Warren (2.6%); and Laurel (2.4%) (Table 66).
- During the 2009-2013 period, a plurality of Kentucky's young driver-involved fatalities occurred on the State's collector roads (40.0%), followed by arterial roads (35.7%) and then local roads (18.9%). Regionally, such crashes were most frequent on arterial roads (40.2%), as



they were throughout the U.S. as a whole (42.6%). From 2009 through 2013, the smallest proportion of young driver-involved fatal crashes in Kentucky, Region 3, and the Nation occurred on collector roads (5.3%, 8.5%, and 12.3%, respectively) (Table 67).

**Table 61. Fatal Crashes and Fatalities of Young Drivers**

	2009	2010	2011	2012	2013	Total 2009 - 2013	% Change: 2013 vs. prior 4-year Avg.
<b>Kentucky</b>							
Fatal Crashes	121	102	81	83	78	465	-19.38%
Young Drivers Killed	57	45	39	44	31	216	-32.97%
<b>Region</b>							
Fatal Crashes	577	496	465	438	386	2,362	-21.86%
Young Drivers Killed	300	223	240	197	162	1,122	-32.50%
<b>U.S.</b>							
Fatal Crashes	4,871	4,348	4,176	4,111	3,746	21,252	-14.41%
Young Drivers Killed	2,302	1,917	1,970	1,848	1,651	9,688	-17.83%

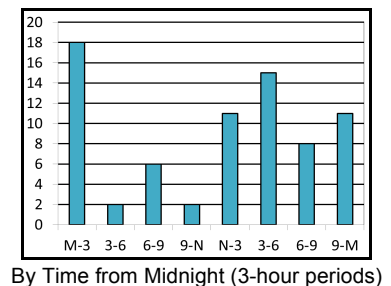
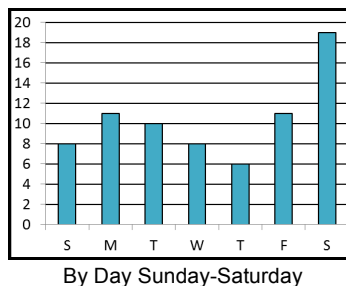
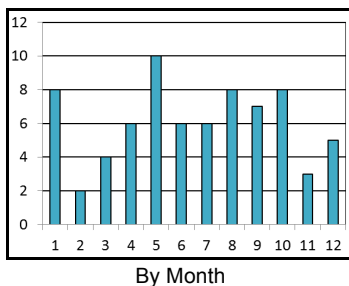


**Figure 24. Young Driver Fatalities as Percent of Total**



**Table 62. Young Driver-Involved Fatal Crashes by Month, Day of Week, and Time of Day: Totals 2009-2013**

	Kentucky		Region	U.S.
	(N=465)		(N=2,362)	(N=21,252)
	N	%	%	%
<b>MONTH</b>				
January	35	7.5%	6.4%	7.0%
February	28	6.0%	6.1%	6.3%
March	26	5.6%	6.4%	7.7%
April	53	11.4%	9.1%	8.2%
May	42	9.0%	10.0%	9.0%
June	47	10.1%	10.3%	9.3%
July	47	10.1%	9.8%	9.7%
August	39	8.4%	9.5%	9.3%
September	37	8.0%	8.3%	8.7%
October	38	8.2%	9.1%	8.9%
November	34	7.3%	7.2%	8.1%
December	39	8.4%	7.7%	7.6%
<b>DAY OF WEEK</b>				
Sunday	73	15.7%	16.4%	17.6%
Monday	60	12.9%	12.4%	12.0%
Tuesday	48	10.3%	10.7%	11.7%
Wednesday	63	13.5%	11.9%	11.6%
Thursday	62	13.3%	12.4%	12.2%
Friday	69	14.8%	16.5%	15.5%
Saturday	90	19.4%	19.8%	19.6%
<b>TIME OF DAY</b>				
Midnight-3am	40	8.6%	13.0%	13.6%
3am-6am	31	6.7%	8.0%	8.3%
6am-9am	40	8.6%	9.7%	9.1%
9am-Noon	40	8.6%	7.0%	7.2%
Noon-3pm	64	13.8%	12.9%	11.8%
3pm-6pm	106	22.8%	18.2%	17.0%
6pm-9pm	80	17.2%	14.8%	16.4%
9pm-Midnight	64	13.8%	16.3%	16.1%
Unknown	0	0.0%	0.1%	0.5%





**Table 63. Driver Factors of Young Drivers Involved in Fatal Crashes**

Factors	2009	2010	2011	2012	2013	Total 2009 - 2013
	(N=129)	(N=106)	(N=85)	(N=85)	(N=80)	(N=485)
	%*	%*	%*	%*	%*	%*
None reported	26.4%	33.0%	24.7%	32.9%	41.3%	31.1%
One or more factors reported	73.6%	67.0%	75.3%	67.1%	58.8%	68.9%
<b>Top Factors</b>						
Driving too fast for conditions and/or in excess of posted speed limit	29.5%	19.8%	23.5%	21.2%	18.8%	23.1%
Inattentive (2006-2009), Distracted (2010 and later), Careless (2012)**	21.7%	28.3%	35.3%	8.2%	8.8%	21.0%
Driving in an erratic, reckless manner	0.0%	1.9%	0.0%	0.0%	1.3%	0.6%
Failure to keep in proper lane	7.0%	1.9%	1.2%	10.6%	8.8%	5.8%
Failure to yield	7.0%	2.8%	8.2%	9.4%	5.0%	6.4%

\*Driver may have multiple factors reported

\*\*Prior to 2010, Inattentive was a single element—Inattentive/Careless (Talking, Eating, Car Phones, etc.). In 2010, many individual factors that had been subsumed in the Inattentive element were broken out into their own separate categories, as Distraction became an entirely new table in FARS. In 2012, Careless was added as a new variable.

Highlighting is to help reader identify most common factors.

**Table 64. Previous Speeding Convictions and Previous Crashes for Young Drivers versus All Drivers: Totals 2009-2013**

	Kentucky				Region		U.S.	
	Young drivers		All drivers		Young drivers	All drivers	Young drivers	All drivers
	(N=485)	%	(N=5,041)	%	(N=2,439)	(N=25,315)	(N=22,009)	(N=224,014)
<b>Previous Speeding*</b>	63	13.0%	574	11.4%	17.5%	16.4%	18.3%	17.2%
<b>Previous Crash Recorded**</b>	110	22.7%	1104	21.9%	17.1%	15.0%	13.0%	11.4%

\*Convictions recorded within three years prior to the fatal crash; counts exclude instances in which no person was identified as a driver.

\*\*Crashes recorded within three years prior to the fatal crash; counts exclude instances in which no person was identified as a driver.

Highlighting is to help reader identify young drivers



**Table 65. Fatalities in Young Driver-Involved Crashes, by Person Type**

	2009	2010	2011	2012	2013	KY 2009-2013 %	Region 2009-2013 %	U.S. 2009-2013 %
<b>Victims</b>	<b>(N=132)</b>	<b>(N=112)</b>	<b>(N=92)</b>	<b>(N=87)</b>	<b>(N=84)</b>	<b>(N=507)</b>	<b>(N=2,620)</b>	<b>(N=24,050)</b>
Young Drivers	57	45	39	44	31	42.6%	42.8%	40.3%
Passengers	32	25	20	12	21	21.7%	24.1%	24.6%
Other Road Users	43	42	33	31	32	35.7%	33.1%	35.1%

**Table 66. Young Driver-Involved Fatalities by County**

County	2009	2010	2011	2012	2013	Total 2009 - 2013		% Change: 2013 vs. prior 4-yr Avg.
						N	%	
Adair	1	1	1	1	0	4	0.8%	-100.0%
Allen	1	0	0	0	2	3	0.6%	700.0%
Anderson	1	0	1	1	0	3	0.6%	-100.0%
Ballard	0	0	0	1	2	3	0.6%	700.0%
Barren	1	3	2	2	2	10	2.0%	0.0%
Bath	0	1	0	2	1	4	0.8%	33.3%
Bell	0	0	0	0	0	0	0.0%	N/A
Boone	2	2	0	5	1	10	2.0%	-55.6%
Bourbon	2	1	0	0	0	3	0.6%	-100.0%
Boyd	1	2	0	0	0	3	0.6%	-100.0%
Boyle	0	2	3	1	0	6	1.2%	-100.0%
Bracken	0	0	0	1	0	1	0.2%	-100.0%
Breathitt	0	1	0	0	0	1	0.2%	-100.0%
Breckinridge	3	2	0	1	1	7	1.4%	-33.3%
Bullitt	2	4	1	2	0	9	1.8%	-100.0%
Butler	0	0	0	0	0	0	0.0%	N/A
Caldwell	0	2	0	0	0	2	0.4%	-100.0%
Calloway	2	3	1	1	2	9	1.8%	14.3%
Campbell	0	1	0	2	1	4	0.8%	33.3%
Carlisle	0	0	0	0	0	0	0.0%	N/A
Carroll	0	0	0	1	1	2	0.4%	300.0%
Carter	1	1	0	2	0	4	0.8%	-100.0%
Casey	2	0	2	0	1	5	1.0%	0.0%
Christian	2	1	1	0	1	5	1.0%	0.0%
Clark	0	1	3	0	1	5	1.0%	0.0%
Clay	0	1	0	2	0	3	0.6%	-100.0%
Clinton	2	0	1	1	0	4	0.8%	-100.0%



County	2009	2010	2011	2012	2013	Total 2009 - 2013		% Change: 2013 vs. prior 4-yr Avg.
						N	%	
Crittenden	0	0	0	0	0	0	0.0%	N/A
Cumberland	0	0	2	0	0	2	0.4%	-100.0%
Daviess	1	1	0	0	2	4	0.8%	300.0%
Edmonson	1	0	0	0	0	1	0.2%	-100.0%
Elliott	0	0	0	0	0	0	0.0%	N/A
Estill	0	1	0	0	2	3	0.6%	700.0%
Fayette	6	2	4	5	1	18	3.6%	-76.5%
Fleming	1	0	0	0	0	1	0.2%	-100.0%
Floyd	1	1	0	1	1	4	0.8%	33.3%
Franklin	0	1	4	0	0	5	1.0%	-100.0%
Fulton	0	1	0	0	0	1	0.2%	-100.0%
Gallatin	0	3	0	0	1	4	0.8%	33.3%
Garrard	0	0	0	0	1	1	0.2%	N/A
Grant	0	2	0	0	0	2	0.4%	-100.0%
Graves	1	0	1	1	3	6	1.2%	300.0%
Grayson	2	0	1	0	0	3	0.6%	-100.0%
Green	3	1	0	0	1	5	1.0%	0.0%
Greenup	3	0	0	3	0	6	1.2%	-100.0%
Hancock	0	1	0	0	0	1	0.2%	-100.0%
Hardin	1	5	1	2	0	9	1.8%	-100.0%
Harlan	2	0	3	0	0	5	1.0%	-100.0%
Harrison	0	0	0	1	1	2	0.4%	300.0%
Hart	0	0	0	1	0	1	0.2%	-100.0%
Henderson	2	0	1	0	2	5	1.0%	166.7%
Henry	1	0	1	0	0	2	0.4%	-100.0%
Hickman	0	0	1	0	0	1	0.2%	-100.0%
Hopkins	2	4	0	1	2	9	1.8%	14.3%
Jackson	0	0	0	0	1	1	0.2%	N/A
Jefferson	9	10	8	3	9	39	7.7%	20.0%
Jessamine	1	1	1	1	2	6	1.2%	100.0%
Johnson	0	0	1	0	1	2	0.4%	300.0%
Kenton	0	0	2	1	0	3	0.6%	-100.0%
Knott	0	1	0	1	1	3	0.6%	100.0%
Knox	4	0	1	2	1	8	1.6%	-42.9%
Larue	0	1	0	0	0	1	0.2%	-100.0%
Laurel	4	3	0	2	3	12	2.4%	33.3%
Lawrence	0	1	0	0	1	2	0.4%	300.0%



County	2009	2010	2011	2012	2013	Total 2009 - 2013		% Change: 2013 vs. prior 4-yr Avg.
						N	%	
Lee	1	0	1	0	1	3	0.6%	100.0%
Leslie	1	0	1	1	0	3	0.6%	-100.0%
Letcher	2	1	2	0	0	5	1.0%	-100.0%
Lewis	1	0	1	0	0	2	0.4%	-100.0%
Lincoln	0	2	0	1	0	3	0.6%	-100.0%
Livingston	0	1	0	0	0	1	0.2%	-100.0%
Logan	4	1	0	0	1	6	1.2%	-20.0%
Lyon	1	1	0	0	0	2	0.4%	-100.0%
Madison	1	5	2	1	0	9	1.8%	-100.0%
Magoffin	0	0	0	0	1	1	0.2%	N/A
Marion	1	0	1	2	1	5	1.0%	0.0%
Marshall	0	0	1	2	2	5	1.0%	166.7%
Martin	0	0	0	1	0	1	0.2%	-100.0%
Mason	1	1	1	1	0	4	0.8%	-100.0%
McCracken	2	2	1	1	3	9	1.8%	100.0%
McCreary	0	0	0	0	1	1	0.2%	N/A
McLean	0	0	1	0	0	1	0.2%	-100.0%
Meade	1	1	1	0	0	3	0.6%	-100.0%
Menifee	0	0	0	0	0	0	0.0%	N/A
Mercer	0	1	2	0	0	3	0.6%	-100.0%
Metcalf	1	1	0	1	2	5	1.0%	166.7%
Monroe	0	0	0	0	0	0	0.0%	N/A
Montgomery	2	1	0	1	0	4	0.8%	-100.0%
Morgan	1	0	0	0	0	1	0.2%	-100.0%
Muhlenberg	0	0	1	1	0	2	0.4%	-100.0%
Nelson	2	2	1	3	0	8	1.6%	-100.0%
Nicholas	4	0	0	0	1	5	1.0%	0.0%
Ohio	1	0	1	0	3	5	1.0%	500.0%
Oldham	2	2	3	0	0	7	1.4%	-100.0%
Owen	1	0	1	1	0	3	0.6%	-100.0%
Owsley	0	1	0	1	0	2	0.4%	-100.0%
Pendleton	4	0	0	0	1	5	1.0%	0.0%
Perry	0	0	2	2	0	4	0.8%	-100.0%
Pike	5	2	1	1	4	13	2.6%	77.8%
Powell	1	1	1	0	0	3	0.6%	-100.0%
Pulaski	4	3	0	1	1	9	1.8%	-50.0%
Robertson	0	0	0	0	0	0	0.0%	-100.0%



County	2009	2010	2011	2012	2013	Total 2009 - 2013		% Change: 2013 vs. prior 4-yr Avg.
						N	%	
Rockcastle	0	0	1	1	1	3	0.6%	100.0%
Rowan	0	3	2	0	0	5	1.0%	-100.0%
Russell	1	0	2	2	1	6	1.2%	-20.0%
Scott	1	2	0	1	2	6	1.2%	100.0%
Shelby	4	1	1	0	0	6	1.2%	-100.0%
Simpson	0	1	1	0	1	3	0.6%	100.0%
Spencer	0	0	1	0	0	1	0.2%	-100.0%
Taylor	0	0	1	3	0	4	0.8%	-100.0%
Todd	3	0	0	0	0	3	0.6%	-100.0%
Trigg	1	0	0	0	0	1	0.2%	-100.0%
Trimble	0	0	0	1	0	1	0.2%	-100.0%
Union	1	0	2	0	0	3	0.6%	-100.0%
Warren	5	1	3	3	1	13	2.6%	-66.7%
Washington	2	0	0	1	0	3	0.6%	-100.0%
Wayne	0	1	3	1	0	5	1.0%	-100.0%
Webster	0	0	0	1	0	1	0.2%	-100.0%
Whitley	0	0	0	0	1	1	0.2%	N/A
Wolfe	0	0	1	0	0	1	0.2%	-100.0%
Woodford	2	5	0	0	3	10	2.0%	71.4%
<b>Total</b>	<b>132</b>	<b>112</b>	<b>92</b>	<b>87</b>	<b>84</b>	<b>517</b>	<b>100.0%</b>	<b>-20.6%</b>

Table 67. Young Driver-Involved Fatalities by Road Type

	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=132)	(N=112)	(N=92)	(N=87)	(N=84)	(N=507)	(N=2,620)	(N=24,050)
<b>Road Type</b>								
Interstate/Expressway	5	8	3	5	6	5.33%	8.51%	12.28%
Arterial	49	39	42	29	22	35.70%	40.23%	42.63%
Collector	50	41	33	44	35	40.04%	27.60%	21.16%
Local	28	24	14	9	21	18.93%	21.30%	23.07%
Unknown	0	0	0	0	0	0.00%	2.37%	0.87%
<b>Total</b>	<b>132</b>	<b>112</b>	<b>92</b>	<b>87</b>	<b>84</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Highlighting is to help the reader identify cells with higher numbers/percentages.



## **VIII. OLDER DRIVERS**



## OLDER DRIVERS – KEY FINDINGS

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### In the period 2009-2013:

- In Kentucky, the number of fatal crashes involving drivers ages 65-74 increased by 2.5% in 2013 when compared to the prior four-year average. Region 3 and the Nation also experienced increases in this index, but by larger margins (a 16.5% increase for Region 3 and a 10.4% increase Nationwide). Driver fatalities for the 65-74 age group increased in Kentucky, by 5.5%. In Region 3 and the U.S., the increase in the number of drivers ages 65-74 killed was larger than the increase in the number of fatal crashes during the same timeframe (a 24.4% increase in such fatalities in Region 3 and an 11.9% increase Nationwide) (Table 68).
- In Kentucky, the proportion of traffic fatalities that were drivers ages 65-74 remained above those of Region 3 and the Nation throughout the five-year period (2009-2013). In 2013, 7.5% of Kentucky's traffic fatalities were drivers ages 65-74, compared to 7.0% in Region 3 and 5.6% Nationwide (Figure 25).
- In 2013, the number of fatal crashes involving drivers ages 75 and older decreased in Kentucky (-4.5%) and throughout Region 3 (-8.1%); Nationwide, there was little change in this index (a 0.6% decrease). In Kentucky and the Region, the number of drivers ages 75 and older killed decreased as well, but by larger margins (-17.6% and -12.2%, respectively). To compare, such deaths showed little change Nationwide (+0.5%) (Table 69).
- In Kentucky, the proportion of traffic fatalities that were drivers ages 75 and older was above that of the Region for three years of the period (2009, 2012, and 2013), and remained above that of the Nation throughout the period (2009-2013), except in 2010. In 2013, 6.4% of Kentucky's traffic fatalities were drivers ages 75 and older, compared to 6.0% in Region 3 and 6.3% Nationwide (Figure 26).
- Drivers ages 65-74 made up the majority of fatalities in Kentucky's fatal crashes involving drivers of this age group (58.2%), as they did in Region 3 (54.7%) and throughout the U.S. (51.7%) during the same years (2009-2013). In Kentucky, passengers of drivers ages 65-74 represented 11.4% of the fatalities in such crashes, and other road users represented 30.4% (Table 70).
- From 2009 through 2013, drivers ages 75 and older constituted a majority of fatalities in Kentucky's fatal crashes involving drivers of this age group (72.6%), as they did in Region 3 (69.0%) and the Nation (64.2%) during the same years (2009-2013). In Kentucky, passengers of drivers ages 75 and older represented 14.4% of the fatalities in such crashes, and other road users represented 13.0% (Table 71).
- During the five-year period in Kentucky, 67.6% of fatal crashes involving drivers ages 65-74 occurred between 9 a.m. and 6 p.m. Similarly, from 2009 through 2013, 64.5% of such crashes occurred during these same hours across Region 3, as did 61.6% Nationwide. Fatal crashes involving drivers ages 65-74 were most frequent on Wednesdays in the State (16.4%), but on Fridays across the Region (17.2%) and throughout the Nation (16.5%) (Table 72).
- In Kentucky, 72.0% of crashes that involved drivers ages 75 and older occurred between 9 a.m. and 6 p.m. Similarly, in Region 3, 72.2% of crashes that involved drivers in this age group occurred during these same hours, as did 72.8% Nationwide. Fatal crashes involving



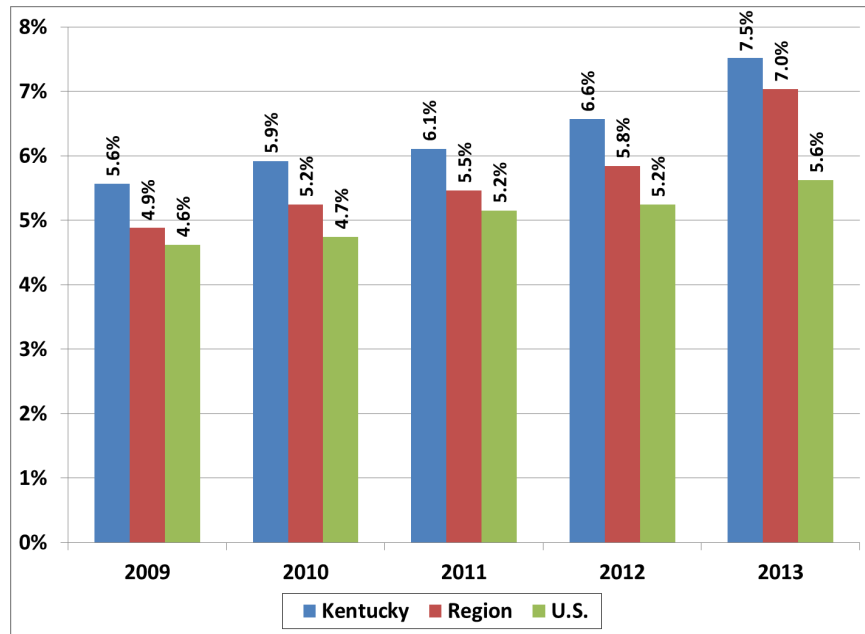
drivers ages 75 *and older* were most frequent on Tuesdays in the State (16.0%) ,but on Fridays across Region 3 (16.6%) and throughout the Nation (15.9%) (Table 73).

- During the 2009-2013 period, the largest proportion of fatalities involving drivers ages 65-74 occurred on arterial roads (47.5%), as they did in Region 3 (51.6%) and throughout the Nation (52.6%). From 2009 through 2013, the smallest proportion of fatal crashes involving drivers ages 65-74 occurred on interstates/expressways in Kentucky and Region 3 (10.8% each), whereas throughout the U.S. as a whole, the smallest percentage occurred on local roads (13.7%) (Table 74).
- During the 2009-2013 period, the highest concentration of fatalities involving drivers ages 75 *and older* occurred on the State's arterial roads (48.1%), as was the case across the Region (52.5%) and throughout the Nation (55.8%). The smallest proportion of such crashes occurred on interstates/expressways in Kentucky (10.2%), across the Region (9.5%), and throughout the Nation (10.3%) (Table 75).

**Table 68. Fatal Crashes and Fatalities Involving Drivers Ages 65-74**

	2009	2010	2011	2012	2013	Total 2009 - 2013	% Change: 2013 vs. prior 4-yr Avg.
<b>Kentucky</b>							
Fatal Crashes	76	64	57	84	72	353	2.5%
Drivers Ages 65-74 Killed	44	45	44	49	48	230	5.5%
<b>Region</b>							
Fatal Crashes	341	333	332	374	402	1,782	16.5%
Drivers Ages 65-74 Killed	191	197	200	222	252	1,062	24.4%
<b>U.S.</b>							
Fatal Crashes	2,765	2,814	2,869	3,124	3,194	14,766	10.4%
Drivers Ages 65-74 Killed	1,566	1,566	1,673	1,771	1,839	8,415	11.9%



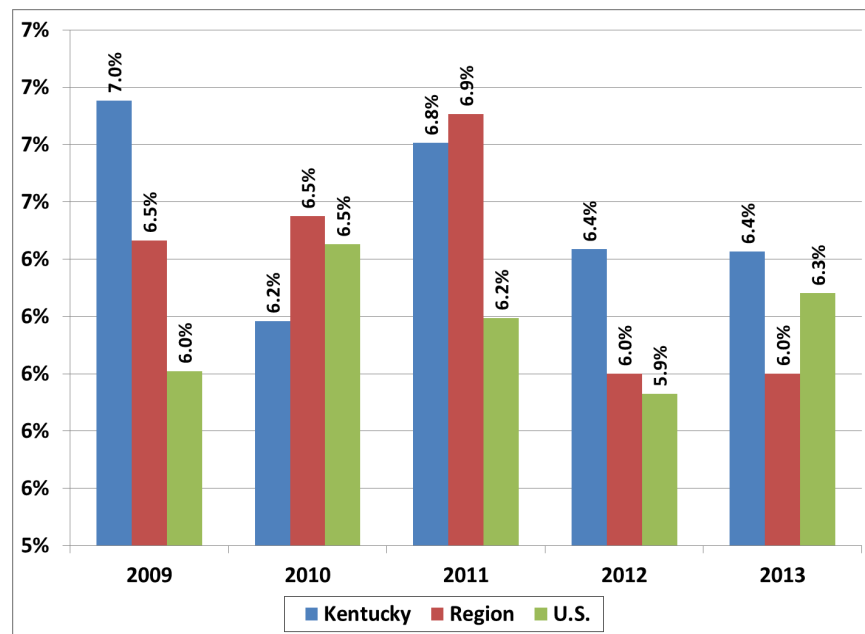


**Figure 25. Driver Ages 65-74 Fatalities as Percent of Total Fatalities**



**Table 69. Fatal Crashes and Fatalities Involving Drivers Ages 75 and Older**

	2009	2010	2011	2012	2013	Total 2009 - 2013	% Change: 2013 vs. prior 4-yr Avg.
<b>Kentucky</b>							
Fatal Crashes	62	56	54	50	53	275	-4.5%
Drivers Ages 75 and Older Killed	55	47	49	48	41	240	-17.6%
<b>Region</b>							
Fatal Crashes	292	291	281	281	263	1,408	-8.1%
Drivers Ages 75 and Older Killed	253	246	253	228	215	1,195	-12.2%
<b>U.S.</b>							
Fatal Crashes	2,495	2,614	2,457	2,492	2,500	12,558	-0.6%
Drivers Ages 75 and Older Killed	2,036	2,129	2,012	2,003	2,055	10,235	0.5%



**Figure 26. Driver Ages 75 and Older Fatalities as Percent of Total Fatalities**



**Table 70. Fatalities In Older Driver-Involved Crashes (Ages 65-74), by Person Type**

	2009	2010	2011	2012	2013	NE 2009-2013 %	Region 2009-2013 %	U.S. 2009-2013 %
<b>Victims</b>	<b>(N=16)</b>	<b>(N=23)</b>	<b>(N=15)</b>	<b>(N=25)</b>	<b>(N=18)</b>	<b>(N=97)</b>	<b>(N=1,182)</b>	<b>(N=16,269)</b>
<b>Older Drivers (Ages 65-74)</b>	10	11	10	14	8	54.6%	56.6%	51.7%
<b>Passengers</b> of Older Drivers (Ages 65-74)	2	3	0	1	2	8.2%	11.9%	11.9%
<b>Other Road Users</b>	4	9	5	10	8	37.1%	31.5%	36.3%

Totals may exceed number of fatalities because one crash may include multiple older drivers in different age groups.

**Table 71. Fatalities In Older Driver-Involved Crashes (Ages 75 and Older), by Person Type**

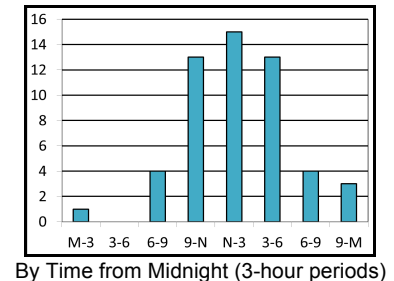
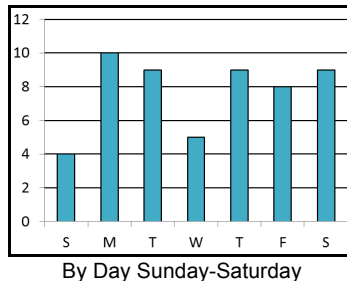
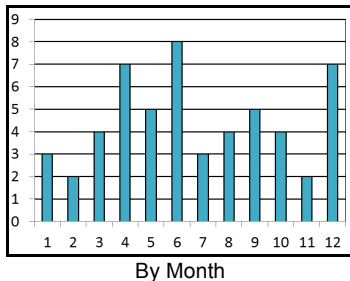
	2009	2010	2011	2012	2013	NE 2009-2013 %	Region 2009-2013 %	U.S. 2009-2013 %
<b>Victims</b>	<b>(N=22)</b>	<b>(N=22)</b>	<b>(N=19)</b>	<b>(N=19)</b>	<b>(N=15)</b>	<b>(N=97)</b>	<b>(N=1,112)</b>	<b>(N=13,671)</b>
<b>Older Drivers (Ages 75+)</b>	17	17	14	13	10	73.2%	69.7%	64.2%
<b>Passengers</b> of Older Drivers (Ages 75+)	3	3	3	2	1	12.4%	14.7%	15.3%
<b>Other Road Users</b>	2	2	2	4	4	14.4%	15.6%	20.4%

Totals may exceed number of fatalities because one crash may include multiple older drivers in different age groups.



**Table 72. Fatal Crashes Involving Drivers Ages 65-74 by Month, Day of Week, and Time of Day:  
Totals 2009-2013**

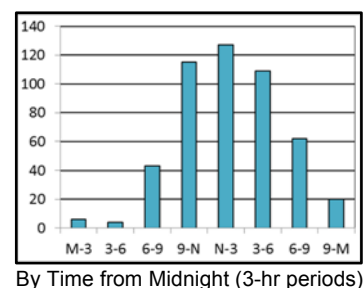
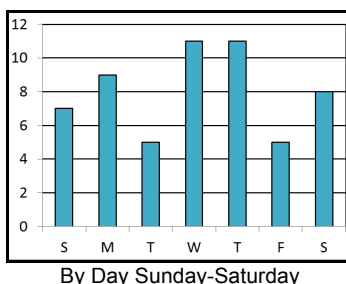
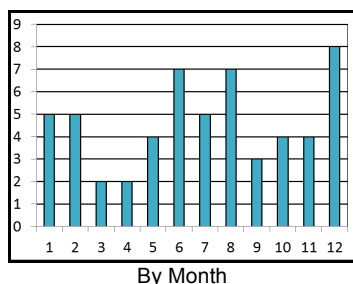
	Kentucky		Region	U.S.
	(N=353)		(N=1,782)	(N=14,766)
	N	%	%	%
<b>MONTH</b>				
January	23	6.5%	5.9%	7.2%
February	24	6.8%	6.0%	6.4%
March	18	5.1%	7.2%	7.4%
April	25	7.1%	9.6%	8.0%
May	35	9.9%	7.9%	8.1%
June	34	9.6%	9.2%	8.8%
July	29	8.2%	8.6%	9.4%
August	34	9.6%	9.5%	9.4%
September	43	12.2%	8.5%	9.0%
October	30	8.5%	8.9%	8.9%
November	31	8.8%	9.8%	8.7%
December	27	7.6%	8.9%	8.7%
<b>DAY OF WEEK</b>				
Sunday	37	10.5%	11.3%	11.9%
Monday	55	15.6%	13.1%	13.5%
Tuesday	43	12.2%	13.7%	13.9%
Wednesday	58	16.4%	14.3%	14.2%
Thursday	48	13.6%	15.2%	14.7%
Friday	57	16.1%	17.2%	16.5%
Saturday	55	15.6%	15.2%	15.4%
<b>TIME OF DAY</b>				
Midnight-3am	6	1.7%	2.4%	2.7%
3am-6am	6	1.7%	2.9%	3.4%
6am-9am	38	10.8%	9.9%	9.8%
9am-Noon	64	18.1%	17.6%	17.4%
Noon-3pm	87	24.6%	24.5%	22.5%
3pm-6pm	88	24.9%	22.4%	21.7%
6pm-9pm	48	13.6%	12.9%	14.6%
9pm-Midnight	16	4.5%	7.2%	7.5%
Unknown	0	0.0%	0.2%	0.4%





**Table 73. Fatal Crashes Involving Drivers Ages 75 and Older by Month, Day of Week, and Time of Day: Totals 2009-2013**

	Kentucky		Region	U.S.
	(N=275)		(N=1,408)	(N=12,558)
	N	%	%	%
<b>MONTH</b>				
January	18	6.5%	6.5%	7.9%
February	20	7.3%	6.4%	6.3%
March	16	5.8%	6.6%	7.7%
April	23	8.4%	9.9%	8.4%
May	24	8.7%	8.1%	8.4%
June	18	6.5%	7.9%	8.5%
July	29	10.5%	8.7%	8.4%
August	15	5.5%	8.5%	8.7%
September	35	12.7%	9.7%	8.9%
October	21	7.6%	9.2%	8.8%
November	34	12.4%	9.6%	9.1%
December	22	8.0%	8.9%	9.0%
<b>DAY OF WEEK</b>				
Sunday	33	12.0%	10.2%	11.2%
Monday	40	14.5%	15.0%	14.7%
Tuesday	44	16.0%	14.8%	15.4%
Wednesday	40	14.5%	14.8%	15.1%
Thursday	39	14.2%	16.5%	15.0%
Friday	42	15.3%	16.6%	15.9%
Saturday	37	13.5%	12.1%	12.8%
<b>TIME OF DAY</b>				
Midnight-3am	2	0.7%	0.8%	1.0%
3am-6am	5	1.8%	2.1%	1.6%
6am-9am	29	10.5%	8.5%	8.9%
9am-Noon	57	20.7%	21.7%	22.5%
Noon-3pm	72	26.2%	26.1%	27.4%
3pm-6pm	69	25.1%	24.4%	22.9%
6pm-9pm	35	12.7%	12.6%	11.2%
9pm-Midnight	6	2.2%	4.0%	4.0%
Unknown	0	0.0%	0.0%	0.4%





**Table 74. Fatalities Involving Drivers Ages 65-74 by Road Type**

	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=85)	(N=73)	(N=63)	(N=93)	(N=81)	(N=395)	(N=1,941)	(N=16,269)
Road Type								
Interstate/Expressway	8	13	4	9	7	10.8%	10.8%	15.4%
Arterial	44	36	29	40	39	47.5%	51.6%	52.6%
Collector	26	17	21	32	29	30.6%	23.7%	17.8%
Local	7	7	9	12	6	11.1%	12.6%	13.7%
Unknown	0	0	0	0	0	0.0%	1.4%	0.6%
<b>Total</b>	<b>85</b>	<b>73</b>	<b>63</b>	<b>93</b>	<b>81</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Highlighting is to help the reader identify cells with higher numbers/percentages.

**Table 75. Fatalities Involving Drivers Ages 75 and Older by Road Type**

	Kentucky					Total 2009 - 2013		
	2009	2010	2011	2012	2013	KY	Region	U.S.
	(N=64)	(N=60)	(N=58)	(N=53)	(N=57)	(N=292)	(N=1,517)	(N=13,671)
Road Type								
Interstate/Expressway	9	3	6	6	5	10.2%	9.5%	10.3%
Arterial	29	29	28	27	21	48.1%	52.5%	55.8%
Collector	21	21	16	14	23	30.6%	23.6%	17.4%
Local	5	7	8	6	8	11.1%	12.3%	15.5%
Unknown	0	0	0	0	0	0.0%	2.1%	0.8%
<b>Total</b>	<b>64</b>	<b>60</b>	<b>58</b>	<b>53</b>	<b>57</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Highlighting is to help the reader identify cells with higher numbers/percentages.



## **IX. DISTRACTION (2010-2013 ONLY)**



## DISTRACTION – KEY FINDINGS

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- Note: This is the fourth year that Distractions were gathered in a separate table; no historical data are available before 2010.
- In 2013, fatal crashes where at least one distraction was reported for at least one vehicle accounted for 28.3% of Kentucky's total fatal crashes for the year, a percentage higher than seen for Region 3 (18.3%) and for the U.S. as a whole (11.6%). In Kentucky, the number of fatal crashes in 2013 where a distraction was recorded (167) represents a decrease of 17.1% in this index when compared to the average of the prior three years (Table 76).
- Of the 771 fatal crashes in Kentucky from 2010 through 2013 where at least one vehicle had at least one distraction recorded, 45.0% were recorded as *distraction/inattention, details unknown*, and 41.8% as *unaware/did not see* (Table 77).
- From 2010 through 2013, *distraction/inattention, details unknown* was most frequently recorded in fatal crashes where at least one vehicle had at least one distraction recorded in Region 3 (53.8%) and across the Nation (46.4%) (Table 77).



**Table 76. Distracted Fatal Crashes (2010-2013 only)**

	2010		2011		2012		2013		% Change: 2013 vs. 2010	% Change: 2013 vs. Prior 3-Yr Avg.
	Crashes	% of Total Crashes	Crashes	% of Total Crashes	Crashes	% of Total Crashes	Crashes	% of Total Crashes		
<b>Kentucky (N=2,647)</b>	<b>208</b>	<b>29.97%</b>	<b>187</b>	<b>27.95%</b>	<b>209</b>	<b>30.12%</b>	<b>167</b>	<b>28.31%</b>	<b>-19.71%</b>	<b>-17.05%</b>
<b>Region (N=13,715)</b>	<b>542</b>	<b>15.66%</b>	<b>594</b>	<b>17.46%</b>	<b>663</b>	<b>18.73%</b>	<b>605</b>	<b>18.28%</b>	<b>11.62%</b>	<b>0.89%</b>
<b>Nation (N=121,226)</b>	<b>3527</b>	<b>11.64%</b>	<b>3497</b>	<b>11.71%</b>	<b>3653</b>	<b>11.78%</b>	<b>3479</b>	<b>11.57%</b>	<b>-1.36%</b>	<b>-2.25%</b>

One or more distractions reported

**Table 77. Distracted Fatal Crashes by Behavior (2010-2013 only)**

Distraction*		2010	2011	2012	2013	2010 - 2013 Total
<b>No Driver Present</b>	<b>Kentucky</b>	2.40%	1.60%	2.39%	4.19%	2.59%
	<b>Region</b>	4.61%	4.55%	3.62%	4.13%	4.20%
	<b>Nation</b>	5.81%	5.92%	6.46%	6.67%	6.22%
<b>Unaware/Did not see</b>	<b>Kentucky</b>	74.52%	81.82%	4.31%	2.99%	41.76%
	<b>Region</b>	41.88%	38.38%	6.03%	4.96%	21.84%
	<b>Nation</b>	26.79%	22.96%	10.18%	11.01%	17.68%
<b>Distracted by Outside Person/Object/Event</b>	<b>Kentucky</b>	2.40%	2.67%	3.35%	0.60%	2.33%
	<b>Region</b>	2.58%	1.68%	3.17%	1.82%	2.33%
	<b>Nation</b>	5.78%	5.38%	5.26%	5.40%	5.45%
<b>Other Distraction</b>	<b>Kentucky</b>	5.77%	3.74%	0.00%	1.20%	2.72%
	<b>Region</b>	11.62%	10.61%	9.20%	10.25%	10.36%
	<b>Nation</b>	6.72%	7.35%	6.35%	4.74%	6.29%
<b>Distracted by Other Occupants</b>	<b>Kentucky</b>	1.92%	2.14%	1.91%	1.20%	1.82%
	<b>Region</b>	1.85%	1.68%	1.66%	2.15%	1.83%
	<b>Nation</b>	4.68%	3.89%	4.05%	4.20%	4.20%
<b>Distracted by Objects in Vehicle/Vehicle Controls</b>	<b>Kentucky</b>	0.48%	0.53%	2.39%	2.99%	1.56%
	<b>Region</b>	1.85%	2.69%	1.66%	1.98%	2.04%
	<b>Nation</b>	4.34%	4.20%	4.46%	4.11%	4.28%
<b>Eating/Drinking/Smoking</b>	<b>Kentucky</b>	0.96%	0.53%	1.44%	0.60%	0.91%
	<b>Region</b>	1.48%	0.51%	0.75%	0.50%	0.79%
	<b>Nation</b>	1.87%	1.94%	1.48%	1.44%	1.68%
<b>Cell Phone</b>	<b>Kentucky</b>	4.81%	4.28%	6.22%	4.79%	5.06%
	<b>Region</b>	4.80%	3.87%	4.52%	7.60%	5.20%
	<b>Nation</b>	10.38%	10.12%	10.40%	11.81%	10.67%
<b>Distraction/Inattention, Details Unknown**</b>	<b>Kentucky</b>	12.98%	8.02%	79.43%	83.23%	45.01%
	<b>Region</b>	32.47%	39.73%	70.44%	68.43%	53.79%
	<b>Nation</b>	37.62%	41.72%	53.52%	52.66%	46.43%

\*Percentage of distracted crashes in which the distraction was recorded in at least one vehicle.

\*\*This category includes the variables: Distraction (Distracted), Details Unknown; Distraction/Inattention; Distraction/Careless; Careless/Inattentive; and Inattention (Inattentive), Details Unknown, as per 2012 FARS User Manual.

Each crash may have involved multiple distractions (distractions recorded at the vehicle level).



## **APPENDIX: DATA BOOK CHANGES RELATED TO FARS 2013**



## Basic Data Moving Average

In the basic data section, the moving average is an average of the current year and the previous two years. Thus, the moving average for the first year in this data's books discussion, 2009, is an average of the values of 2007, 2008, and 2009.

## Basic Data Linear Trend Line

In the basic data section, a linear trendline is also provided to show, in the simplest terms, whether the past trends (usually in fatalities) have been up, down, or flat. A linear trendline is often used as a predictive tool as well, but the reliability of its predictions depends on how much of the variation in variable "Y" (e.g., fatalities) is accounted for by change in variable "X" (e.g., year). The  $R^2$  value for the linear trendline provides an index of that reliability. An  $R^2$  value of 1.00 indicates that *all* of the variation in "Y" is accounted for by change in "X". On the other hand, an  $R^2$  value of 0.00 indicates that *none* of the variability in Y is accounted for by a unit change in X, i.e., fatalities vary totally independently of time. The predictions (i.e., future fatality counts) that are provided for the linear trendline assume a high  $R^2$  value *and* they assume an environment in which there is constancy with regard to important factors (e.g., the legal environment, current enforcement practices, the economy, etc.). To the extent that these assumptions are accurate, the reliability of the linear estimates is high. To the extent that these conditions are not met, the reliability of these estimates deteriorates.

In general, States have been encouraged to examine the *linear trends* and the *three-year moving averages* in their data over the most recent five-year period as a precursor to establishing goals and performance measures. This has been common practice for several years.

Consistent with these recommendations, we provide the linear trendline (as well as the three-year moving average) for each fatality area that we examine *and* we extend the linear trendline for three years beyond the last data point.

When presenting these predictions, however, we also note the  $R^2$  value of the linear trendline (i.e., the reliability or robustness of the trendline) as well as any other factors that might affect the reliability/validity of the linear trendline as a predictor (e.g., an expected change in the economy).

## Speed Limits

In the 2010 FARS database, speed limits were changed from a crash to a pre-crash level variable. Thus, each crash could have multiple speed limits – as many speed limits as there were cars in the crash, provided that each car was travelling on a different roadway prior to the critical pre-crash event. However, to allow us to look at speed limits at the crash level, we took the *maximum* speed limit of all the vehicles involved in the crash, setting that as the crash-level speed limit.

Beginning in 2010, an additional speed limit data element, 'Not Reported', began usage. 'Not Reported' and 'Unknown' were collapsed together into one category for 2010 and later.



## Motorcycle Helmet Use

Beginning in 2010, FARS reporting differentiates compliant helmets and those that do not meet regulatory requirements. Prior to 2010, motorcyclists' use of compliant and use of non-compliant helmets both were likely reported as "Helmet Used." Starting in 2010, non-compliant helmets were no longer reported as "Helmet Used."

## Census Data

Population data were drawn from the U.S. Census Bureau's vintage estimates for 2007 through 2009. For 2010, 2011, and 2012, and 2013 post-census intercensal data, as opposed to vintage data, were used. The methodology behind intercensal data may be found here:

[http://www.census.gov/popest/methodology/2000-2010\\_Intercensal\\_Estimates\\_Methodology.pdf](http://www.census.gov/popest/methodology/2000-2010_Intercensal_Estimates_Methodology.pdf)

<http://www.census.gov/popest/methodology/2013-est-relnotes.pdf>

## Inattention (Distraction) Driver Factors

Beginning in 2010, many elements that previously had been encoded at the vehicle/driver level were broken out into separate tables (e.g., the new *Distraction* and *Violation* tables).

In Tables 52 (Fatal Crashes Involving Motorcycles – Operator Factors) and 63 (Driver Factors of Young Drivers Involved in Fatal Crashes), for the years 2007 through 2009, *Inattentive* was a single element – *Inattentive/Careless (Talking, Eating, Car Phones, etc.)*. However, in 2010, many individual factors that had been subsumed under the *Inattentive* data element were broken out into their own separate categories, as *Distraction* became an entirely new table in FARS.

In 2010, there were many more categories of *Inattention* (e.g., *Driver Distracted By Moving Object in Vehicle*, *Smoking Related Distraction*, etc.) to be found in the *Distraction* table. Thus, if any of these *Distraction* data elements were used in a crash (with the exception of *Not Reported* and *Unknown if Distracted*), the driver was considered to have been *Inattentive* (see Tables 52 and 63).





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National Highway Traffic Safety Administration

# **Analysis of Fatal Crash Data Supplement Kentucky: 2009-2013**

## **Driving Under the Influence of Drugs (DUID)**

**A Summary of Data from the  
Fatality Analysis Reporting System (FARS)**



## About This Report

This report supplements the 2009-2013 Data Book prepared for Kentucky describing the motor vehicle fatal crashes and fatalities that occurred in the State during that period, based on analyses of FARS data for the standard core performance measures agreed upon by NHTSA and GHSA. In addition to these core safety performance measures, NHTSA Region 3 and its States have requested a new section on driving under the influence of drugs (DUID) using data from FARS. For each State, it has been determined: 1) What percent of drivers killed were tested for drugs?; 2) What percent of tested drivers tested positive for legal and/or illegal drugs?; and 3) Which drugs were most commonly found and in what percentage of fatally-injured drivers with positive test results?

The results of these analyses are presented below for the State of Kentucky, for Region 3 as a whole, and for the Nation. It is important to note that it is not possible to differentiate between legal and illegal drugs using the FARS data. Also, because of the vast array of drugs that are listed in FARS, it is most meaningful to report findings about which drugs were identified (in those fatally-injured drivers who tested positive) at the level of drug category, rather than at the level of individual drugs. Next, in terms of FARS reporting, one driver can only have up to three different drug tests and up to three different positive drug results, and different tests may produce different results. Therefore, if a driver tests positive for four or more drugs, the results are recorded based on hierarchy (e.g., Narcotics over Depressants over Stimulants, etc.) and only the top three results are recorded.

## Analysis Methods

There are three FARS variables that the computed variables below have to be calculated for separately, and then combined: DRUGRES1, DRUGRES2, DRUGRES3.

### Table S1 calculations

Drivers Tested: This is the sum of three calculated variables:

- TestedDrugsFound = code between 100 and 996, *or* code 998 defines positive counts.
- TestedNoDrugReported = 0, 1, 95 or 999
- TestedResultsUnknown = 997

### Table S2 calculations

Please note that the counts in this section are of drugs, not drivers; each driver can have up to 3 drugs. The drug counts for the various drug categories are self-explanatory except for OtherDrugs and Unknown:

- OtherDrug = 996
- Unknown = 998
- Total = all the categories are added. Again, since one driver can have multiple drugs, these are counts of drugs, not drivers.



## Analysis Results

As seen in Table S1, the number of *drivers killed* in Kentucky decreased to its lowest point of the period in 2013, despite an increase in 2012. The 2013 total represents a 16.4% decrease when compared to the 2009-2012 average and a 23.4% decrease when compared to 2009. During the same years, the number of drivers killed also decreased in Region 3 and throughout the U.S. as a whole, but by much a smaller proportion (by 4.2% and 2.0%, respectively, in 2013 when compared to the prior four years).

In Kentucky, the proportion of drivers killed that were *tested for drugs* varied throughout the 2009-2013 period, but increased slightly overall, by 2.6% in 2013 when compared to the 2009-2012 average and by 2.7% in 2013 when compared to 2009. The proportion of such drivers that *tested positive* in the State was at its highest level in 2013, representing an increase 8.8% when compared to the 2009-2012 average and an increase of 16.0% when compared to the 2009 percentage.

Across Region 3, the proportion of drivers killed that were tested for drugs decreased by 16.2% in 2013 compared to the prior four years and by 8.1% in 2013 when compared to 2009. While the proportion of drivers killed that were tested for drugs *decreased* across the Region, the proportion such drivers who *tested positive increased*, by 10.5% in 2013 when compared to the 2009-2012 average and by 8.7% in 2013 when compared to the 2009 proportion.

Throughout the Nation, the proportion of drivers killed that were tested for drugs *decreased* in 2013, by 5.3% when compared to the 2009-2012 average and by 1.7% when compared to the proportion in 2009. Like in Region 3, the proportion of fatally-injured drivers that were tested for drugs *decreased* Nationwide but the proportion of those tested drivers who *tested positive increased*, by 10.9% in 2013 when compared to the prior four years and by 17.8% in 2013 when compared to 2009.

**Table S1. Drivers Killed, Tested for Drugs, and Test Outcome**

		2009	2010	2011	2012	2013	Total 2009-2013	% Change: 2013 vs. 2009	% Change: 2013 vs. Prior 4-yr Avg.
<b>Drivers Killed</b>									
Total	<b>Kentucky</b>	591	524	512	541	453	2,621	-23.4%	-16.4%
	<b>Region</b>	2,655	2,475	2,463	2,532	2,425	12,550	-8.7%	-4.2%
	<b>Nation</b>	21,835	21,072	20,815	21,490	20,871	106,083	-4.4%	-2.0%
% Tested	<b>Kentucky</b>	74.8%	74.8%	79.3%	70.6%	76.8%	75.2%	2.7%	2.6%
	<b>Region</b>	48.2%	57.4%	55.1%	50.9%	44.3%	51.2%	-8.1%	-16.2%
	<b>Nation</b>	61.5%	65.6%	63.8%	64.4%	60.5%	63.1%	-1.7%	-5.3%
% Positive*	<b>Kentucky</b>	41.9%	41.3%	48.3%	47.1%	48.6%	45.3%	16.0%	8.8%
	<b>Region</b>	34.6%	27.6%	37.8%	36.0%	37.6%	34.5%	8.7%	10.5%
	<b>Nation</b>	32.3%	32.9%	35.4%	36.6%	38.1%	35.0%	17.8%	10.9%

\*Excludes Nicotine, Aspirin, and Alcohol.



With a focus on the most recent year's experience, Table S2 shows that in Kentucky in 2013, 39.4% of drugs found among fatally-injured drivers who were tested for drugs and tested positive were *narcotics*, the highest percentage of any category. In the State, the categories with next highest percentages of drugs found in 2013 were *depressants* (27.0%) and *cannabinoids* (20.3%).

In Region 3, the categories with the highest proportions of drugs found among drivers killed who were tested for drugs and tested positive in 2013 were: *narcotics* (33.3%); *depressants* (23.2%); *cannabinoids* (16.1%); and *other drugs* (which includes caffeine and mild analgesics) (15.1%). Nationwide, 26.6% of all drugs that were found among drivers killed in 2013 (who were tested for drugs and tested positive) were *cannabinoids*, 20.2% were *other drugs*, 17.1% were *stimulants*, 16.6% were *depressants*, and 15.5% were *narcotics*.

**Table S2. Drugs Found Among Drivers Killed Who Tested Positive**

<b>Drug Classification*</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Narcotic</b> e.g., Codeine (and combination products), Heroin, Hydrocodone (and combination products), Methadone, Morphine (and combination products), Opium (and combination products), oxycodone, etc.	<b>Kentucky</b>	33.09%	37.39%	38.75%	42.29%	39.42%
	<b>Region</b>	27.45%	30.28%	31.33%	32.08%	33.33%
	<b>Nation</b>	16.00%	16.51%	17.30%	15.50%	15.52%
<b>Depressant</b> e.g., Barbiturates, Diazepam and other Benzodiazepines, etc.	<b>Kentucky</b>	28.31%	32.61%	29.76%	26.88%	26.97%
	<b>Region</b>	21.63%	27.85%	23.67%	21.28%	23.16%
	<b>Nation</b>	16.68%	18.79%	17.47%	16.17%	16.63%
<b>Stimulant</b> e.g., Amphetamine, Cocaine, Methamphetamine, etc.	<b>Kentucky</b>	8.82%	7.39%	6.92%	7.11%	7.05%
	<b>Region</b>	13.98%	8.97%	9.58%	11.27%	10.35%
	<b>Nation</b>	17.82%	15.91%	16.07%	15.50%	17.09%
<b>Hallucinogen</b> e.g., Ketamine, LSD, Mescaline, Psilocybin, etc.	<b>Kentucky</b>	1.47%	0.00%	0.69%	1.58%	0.00%
	<b>Region</b>	1.00%	0.00%	0.27%	0.78%	0.35%
	<b>Nation</b>	0.49%	0.39%	0.22%	0.43%	0.51%
<b>Cannabinoid</b> e.g., Hashish, Marijuana, THC, etc.	<b>Kentucky</b>	23.53%	17.39%	19.38%	19.37%	20.33%
	<b>Region</b>	18.47%	16.26%	19.02%	17.06%	16.14%
	<b>Nation</b>	25.67%	25.48%	24.16%	26.23%	26.56%
<b>Phencyclidine (PCP)</b>	<b>Kentucky</b>	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Region</b>	1.33%	1.12%	1.64%	0.94%	1.23%
	<b>Nation</b>	0.46%	0.42%	0.45%	0.39%	0.34%
<b>Anabolic Steroid</b>	<b>Kentucky</b>	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Region</b>	0.00%	0.19%	0.00%	0.16%	0.18%
	<b>Nation</b>	0.02%	0.03%	0.03%	0.06%	0.02%
<b>Inhalant</b> e.g., Anesthetic gasses, Chloroform, Ether, Nitrous Oxide, etc.	<b>Kentucky</b>	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Region</b>	0.00%	0.00%	0.00%	0.16%	0.00%
	<b>Nation</b>	0.18%	0.05%	0.19%	0.18%	0.11%
<b>Other Drug</b> e.g., Caffeine and mild analgesics	<b>Kentucky</b>	4.41%	5.22%	4.50%	2.77%	6.22%
	<b>Region</b>	15.64%	14.58%	14.09%	15.81%	15.09%
	<b>Nation</b>	19.52%	19.35%	20.06%	22.76%	20.22%
<b>Unknown Drug</b>	<b>Kentucky</b>	0.37%	0.00%	0.00%	0.00%	0.00%
	<b>Region</b>	0.50%	0.75%	0.41%	0.47%	0.18%
	<b>Nation</b>	3.17%	3.06%	4.05%	2.78%	3.02%

\*Multiple tests may be administered and different tests may produce different results.

Total counts include positive results only and do not include instances where a drug test was administered but the results are unknown.